A.I.A. FILE NO. 10-B

**STRUCTURAL**

**GLAZED**

**UNGLAZED**

# Facing tile

***produced to conform to***

***ASA modular standards***

**FACING TILE INSTITUTE**

*affiliated with*

**STRUCTURAL CLAY PRODUCTS INSTITUTE**

*Washington, D. C.*

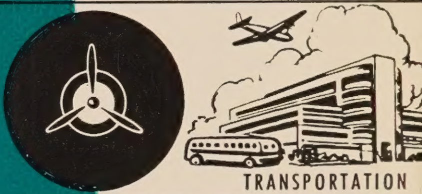
**CATALOG 52-C**

HOSPITALS

INDUSTRIAL PLANTS

PACKING PLANTS

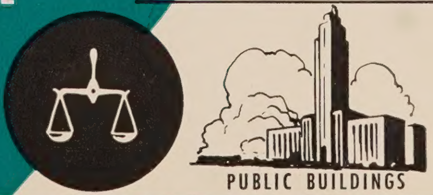
SCHOOLS


TRANSPORTATION

FOOD PROCESSING

RENTAL HOUSING

DAIRY PRODUCTS


PUBLIC BUILDINGS

DRUGS & CHEMICALS

A.I.A. FILE NO. 10-B

# PRODUCTS AND GUARANTEE *of the* FACING TILE INSTITUTE

## ORGANIZATION

The Facing Tile Institute comprises the leading manufacturers of structural glazed and unglazed facing tile. This dependable organization of service and quality, which has so long served the architectural profession and other users of high grade building materials, constantly aims toward further improvement and strives to increase its policy of progress, coordination and simplification. It is ever-mindful of its prestige and responsibilities and takes pride and pleasure in offering its services to the professions of the building industry.

## PRODUCTS

The products of the members of the Facing Tile Institute include all of the varied shapes and sizes, together with the necessary and supplementary shapes, in a variety of colors and with finishes of ceramic glaze, salt glaze, clear glaze or unglazed, all produced from light burning de-aired clay. Years of experience have proved that this type of clay provides the best body for superior glazed or unglazed facing tile. To obtain a grade of ware meeting the Facing Tile Institute Specifications, the architect should always include the stipulation "produced from a light burning de-aired clay."

Servicing jobs is a primary requisite of each Facing Tile Institute member, and all members must have proved to be fully capable of serving jobs of any size with the required quality, and strictly in accordance with the Institute's specifications for the type of ware desired. Each member manufacturer is an established producer with experience in every type of job involving facing tile.

## STANDARDIZED SIZES AND QUALITY

Standardized sizes and quality have been achieved through the Institute's organized effort in cooperation with leading architects, universities and Government agencies. The coordination and standardization have greatly reduced the number of sizes and shapes without in any way restricting the full expression of the designer's artistic ideas. This program of simplification is of invaluable aid to the architect in design, and is of equal importance to the contractor. Further improvement in quality and shapes is consistently being sought through the Institute's continuous research program. With a superior product assured by the quality standards set forth in the Institute's specifications, architects may be assured of receiving on the job the best produced in glazed or unglazed facing tile by specifying the products produced by members of the Facing Tile Institute.

## GUARANTEE

Each member of the Facing Tile Institute guarantees that any ware manufactured by him will conform to the quality standards, tolerances and grading rules established by the Institute. If it can be established within reasonable time, but in no event longer than one year, that any material does not conform to these standards, the manufacturer will replace defective units. The measure of damage after ware has been installed will be the replacement of defective units without charge at the factory, but no charge for labor or other expenses required to repair defective ware or damage occasioned by it will be allowed. This guarantee is expressly in lieu of all other guarantees and warranties expressed or implied and of all other obligations or liability on the manufacturer's part, and the manufacturer neither assumes nor authorizes any other person to assume for him any other liability in connection with the sale of his ware.

In no event will replacement of Off-Grades be made after installation. No replacement will be made of ware chipped on job or after installation.

**For walls of beauty, permanence and sanitation, the architect should specify products made by the members of the**

**FACING TILE INSTITUTE, Washington 6, D. C.**

# specifications

## FOR CERAMIC COLOR GLAZE STRUCTURAL FACING TILE

### 1. WORKMANSHIP

The body of all units shall be of clear burning, deaired fire clay burned as straight and true as careful manufacture can produce. The finished face or faces of all units that will be exposed when in place shall be covered with a ceramic colored glaze, compounded of metallic oxides, chemicals and clays thoroughly ground together and sprayed upon a previously formed body. The units shall then be burned at high temperature, fusing the glaze to the body, making them inseparable.

### 2. SIZES AND SHAPES

The face sizes of ceramic color glaze units and fittings therefore shall be as specified.

### 3. UNIT DESIGN

All ceramic color glaze units shall conform to the requirements of Sections 1 to 5, inclusive, of the Physical Requirements of the Facing Tile Institute, as to number of cells, shell and web thickness, scoring and coring.

### 4. SELECT QUALITY

Select Quality, Ceramic Color glaze units are designed for use with ¼-inch mortar joints. Select Quality, "8W" series (7¾ x 15¾ face size), are furnished ground edge only.

**(a) Face Dimension Tolerances.** The total variation in the finished face dimensions of units shall be not more than the amounts shown in Table I.

### TABLE I

### Permissible Variations in Face Dimensions

| Standard Face Dimension (Height, Length, Return or Reveal) | Maximum Difference Between Dimension of Any Unit and the Standard Dimension | | Maximum Difference Between Largest and Smallest Unit in One Lot* |
|---|---|---|---|
| | If Larger | If Smaller | |
| Inches | Inch | Inch | Inch |
| 2-3/8 | 1/16 | 3/32 | 3/32 |
| 3-3/4 | 1/16 | 3/32 | 3/32 |
| 5-1/16 | 1/16 | 4/32 | 4/32 |
| 7-3/4 | 1/16 | 5/32 | 6/32 |
| 11-3/4 | 1/16 | 7/32 | 8/32 |
| | Ground | edge units only | |
| 7-3/4 | 1/16 | 1/16 | 3/32 |
| 15-3/4 | 1/16 | 1/16 | 3/32 |

NOTE 1. *Size of lot shall be determined by agreement between the purchaser and the seller.

2. Permissible variations for units having dimensions more than ¼ inch greater than shown in Table I shall be the same as for the next larger dimension.

**(b) Bed Depth Dimension Tolerances.** The total variation in the bed depth (through the wall) dimension of units shall be not more than the amount shown in Table II.

### TABLE II

### Permissible Variations in Bed Depth Dimensions

| Standard Bed Depth Dimension (Wall thickness) | Maximum Difference Between Dimension of Any Unit and the Standard Dimension | | Maximum Difference Between Largest and Smallest Unit in One Lot |
|---|---|---|---|
| | If Larger | If Smaller | |
| Inches | Inch | Inch | Inch |
| 1-3/4 | 1/8 | 2/16 | 2/16 |
| 3-3/4—two face | 1/8 | 2/16 | 2/16 |
| 3-3/4 | 1/8 | 3/16 | 3/16 |
| 5-3/4 | 1/8 | 4/16 | 4/16 |
| 7-3/4 | 1/8 | 5/16 | 5/16 |

NOTE 1. Permissible variations for units having dimensions more than ¼ inch greater than shown in Table II shall be the same as for the next larger dimension.

2. No bed depth greater than 3¾ inches is made in trim shades or two-faced units of Ceramic Color Glaze.

3. Variation in the bed depth of individual units is controlled by the limitations on distortion. The thickness of a unit shall be considered either the maximum or minimum thickness, whichever is the farthest from the standard dimension.

**(c) Distortion Tolerances.** The maximum permissible distortion of the plane and the edges of the face of individual units from a plane surface and from a straight line respectively shall not exceed the amount shown in Table III.

### TABLE III

### Permissible Distortion

| Standard Face Dimensions (Height and Length) In Inches | Maximum Permissible Distortion In Inches |
|---|---|
| 2-3/8 x 7-3/4 | 2/32 |
| 5-1/16 x 7-3/4 | 2/32 |
| 5-1/16 x 11-3/4 | 3/32 |
| 3-3/4 x 11-3/4 | 3/32 |
| 7-3/4 x 11-3/4 | 5/32 |
| 7-3/4 x 15-3/4 | 6/32 |

NOTE 1. When convex units are laid upon a plane surface, the apparent variation is greater than the actual variation from the plane of the unit.

2. Distortion tolerances for units having dimensions more than ¼ inch greater than shown in Table III shall be the same as for the next larger dimension.

**(d) Finish.** The glaze shall be free from chips, crazes, blisters, crawling or other imperfections detracting from the appearance of the finished wall when viewed at a distance of 5 feet.

**(e) Tests of Finish.** Unit faces shall pass the standard tests of the Facing Tile Institute or of the American Society for Testing Materials (Designation C126—) for Imperviousness, Chemical Resistance of Finish and Resistance to Crazing (Autoclave Test).

**(f) Color and Texture.** The textures shall be mottled, stippled, or smooth, and the color of the finished surface shall conform to an approved sample consisting of 5 stretcher units fully representing the range of shade and texture. For colors see page 27.

**(g) Compressive Strength.** The compressive strength of units in pounds per square inch based upon gross area shall be not less than the amounts shown in Table IV.

### TABLE IV

### Compressive Strength

| Direction of Coring | Minimum Average of 5 Units Lbs. Per Sq. In. | Individual Minimum One Unit Lbs. Per Sq. In. |
|---|---|---|
| Vertical | 3000 | 2500 |
| Horizontal | 2000 | 1500 |

## 5. SUPPLEMENTARY REQUIREMENTS

(a) **Opacity.** Where opacity of finish is desired, and opaque glazes are specified, they shall not show the color of the body, nor visible stain from the opacity test.

## 6. B QUALITY

(a) **Dimension and Distortion Tolerances.** B Quality, Ceramic Color Glaze units may have greater variation than permitted for Select Quality.

(b) **Finish.** The glaze shall be free from large chips, crazes or blisters, but this quality may contain units having small chips and slight mechanical or glaze imperfections.

(c) **Tests of Finish.** Many of the units furnished as B Quality will pass the tests for finish required of Select Quality. However, failure to pass these tests cannot be cause for rejection as all units may not meet the test requirements.

(d) **Color and Texture.** The textures shall be mottled, stippled, and smooth, and the color of the finished surface shall be indicated by a sample consisting of 5 stretcher units. However, the shade range in the B Quality may be wider than the range represented by the sample. For colors see page 27.

# FOR CLEAR GLAZE STRUCTURAL FACING TILE

## 1. WORKMANSHIP

The body of all units shall be of clear burning, deaired fire clay burned as straight and true as careful manufacture can produce. The finished face or faces of all units that will be exposed when in place shall be covered with a translucent or tinted glaze having a lustrous finish, compounded of metallic oxides, chemicals and clays thoroughly ground together and sprayed upon a previously formed body. The units shall then be burned at high temperatures, fusing the glaze to the body, making them inseparable.

## 2. SIZES AND SHAPES

The face sizes of clear glazed units and fittings therefor shall be as specified.

## 3. UNIT DESIGN

All clear glaze units shall conform to the requirements of Sections 1 to 5, inclusive, of the Physical Requirements of the Facing Tile Institute, as to number of cells, shell and web thickness, scoring and coring.

## 4. COLOR AND TEXTURE

The texture shall be smooth and the color of the finished surface shall conform to an approved sample consisting of 5 stretcher units fully representing the range of shade. For colors see page 27.

## 5. TESTS OF FINISH

Unit faces shall pass the standard tests of the Facing Tile Institute or of the American Society for Testing Materials (Designation C126—) for Imperviousness, Chemical Resistance of Finish, and Resistance to Crazing (Autoclave Test).

## 6. COMPRESSIVE STRENGTH

The compressive strength of units in pounds per square inch based upon gross area shall be not less than the amount shown in Table I.

### TABLE I

### Compressive Strength

| Direction of Coring | Minimum Average of 5 Units Lbs. Per Sq. In. | Individual Minimum One Unit Lbs. Per Sq. In. |
|---|---|---|
| Vertical | 3000 | 2500 |
| Horizontal | 2000 | 1500 |

## 7. BED DEPTH DIMENSION TOLERANCES

The total variation in the bed depth (through the wall) dimension of units shall be not more than the amount shown in Table II.

### TABLE II

### Permissible Variations in Bed Depth Dimensions

| Standard Bed Depth Dimension (Wall Thickness) | Maximum Difference Between Dimension of Any Unit and the Standard Dimension | | Maximum Difference Between Largest and Smallest Unit in One Lot |
|---|---|---|---|
| | If Larger | If Smaller | |
| Inches | Inch | Inch | Inch |
| 1-3/4 | 1/8 | 2/16 | 2/16 |
| 3-3/4—two face | 1/8 | 2/16 | 2/16 |
| 3-3/4 | 1/8 | 3/16 | 3/16 |
| 5-3/4 | 1/8 | 4/16 | 4/16 |
| 7-3/4 | 1/8 | 5/16 | 5/16 |

NOTE 1. Permissible variations for units having dimensions more than ¼ inch greater than shown in Table II shall be the same as for the next larger dimension.

2. No bed depth greater than 3¾ inches is made in trim shades or two-faced units of Clear Glaze.

3. Variation in the bed depth of individual units is controlled by the limitations on distortion. The thickness of a unit shall be considered either the maximum or minimum thickness, whichever is the farthest from the standard dimension.

## 8. DISTORTION TOLERANCES

The maximum permissible distortion of the plane and the edges of the face of individual units from a plane surface and from a straight line respectively shall not exceed the amount shown in Table III.

## TABLE III

### Permissible Distortion

| Standard Face Dimensions (Height and Length) | Maximum Permissible Distortion |
|---|---|
| In Inches | In Inches |
| 2-3/8 x 7-3/4 | 2/32 |
| 5-1/16 x 7-3/4 | 2/32 |
| 5-1/16 x 11-3/4 | 3/32 |
| 3-3/4 x 11-3/4 | 3/32 |
| 7-3/4 x 11-3/4 | 5/32 |

NOTE 1. When convex units are laid upon a plane surface, the apparent variation is greater than the actual variation from the plane of the unit.

2. Distortion tolerances for units having dimensions more than ¼ inch greater than shown in Table III shall be the same as for the next larger dimension.

## 9-A. SELECT QUALITY

Select Quality, clear glaze units are designed for use with ¼ inch mortar joints.

## TABLE IV

### Permissible Variations in Face Dimensions

| Standard Face Dimension (Height, Length, Return or Reveal) | Maximum Difference Between Dimension of Any Unit and the Standard Dimension: If Larger | If Smaller | Maximum Difference Between Largest and Smallest Unit in One Lot* |
|---|---|---|---|
| Inches | Inch | Inch | Inch |
| 2-3/8 | 1/16 | 3/32 | 3/32 |
| 3-3/4 | 1/16 | 3/32 | 3/32 |
| 5-1/16 | 1/16 | 4/32 | 4/32 |
| 7-3/4 | 1/16 | 5/32 | 6/32 |
| 11-3/4 | 1/16 | 7/32 | 8/32 |

NOTE 1. *Size of lot shall be determined by agreement between the purchaser and the seller.

2. Permissible variations for units having dimensions more than ¼ inch greater than shown in Table IV shall be the same as for the next larger dimension.

(a) **Face Dimension Tolerances.** The total variation in the finished face dimensions of units shall be not more than the amounts shown in Table IV.

(b) **Finish.** The glaze shall be free from chips, crazes, blisters, crawling or other imperfections detracting from the appearance of the finished wall when viewed at a distance of 5 feet.

## 9-B STANDARD QUALITY

Standard Quality, clear glaze units are designed for use with ¼-inch mortar joints.

(a) **Face Dimension Tolerances.** The total variation in the finished face dimensions of units shall be not more than the amount shown in Table V.

## TABLE V

### Permissible Variations in Face Dimensions

| Standard Face Dimension (Height, Length, Return or Reveal) | Maximum Difference Between Dimension of Any Unit and the Standard Dimension: If Larger | If Smaller | Maximum Difference Between Largest and Smallest Unit in One Lot* |
|---|---|---|---|
| Inches | Inch | Inch | Inch |
| 2-3/8 | 3/32 | 3/32 | 3/32 |
| 3-3/4 | 3/32 | 4/32 | 4/32 |
| 5-1/16 | 3/32 | 5/32 | 5/32 |
| 7-3/4 | 3/32 | 6/32 | 6/32 |
| 11-3/4 | 3/32 | 8/32 | 8/32 |

NOTE 1. *Size of lot shall be determined by agreement between the purchaser and the seller.

2. Permissible variations for units having dimensions more than ¼ inch greater than shown in Table V shall be the same as for the next larger dimension.

(b) **Finish.** The glaze shall be free from chips, crazes, blisters, crawling or other imperfections detracting from the appearance of the finished wall when viewed at a distance of 5 feet except that not more than 20 percent of the units may have slight mechanical or glaze imperfections and small chips.

## FOR SALT GLAZE STRUCTURAL FACING TILE

### 1. WORKMANSHIP

The body of all units shall be clear burning, deaired fire clay burned as straight and true as careful manufacture can produce. The finished face or faces of all units that will be exposed when in place shall be covered with a glaze having a lustrous finish produced by salt and chemicals applied to a previously formed body as vapor during burning and matured and fused to the body at high temperatures.

### 2. SIZES AND SHAPES

The face sizes of salt glaze units and fittings therefor shall be as specified.

### 3. UNIT DESIGN

All salt glaze units shall conform to the requirements of Sections 1 to 5, inclusive, of the Physical Requirements of the Facing Tile Institute, as to number of cells, shell and web thickness, scoring and coring.

### 4. COLOR AND TEXTURE

The texture shall be smooth and the color (reflecting the color of the clay body) shall conform to an approved sample, consisting of 5 stretcher units, fully representing the range of shade. No trim shades are made in this type. For colors see page 27.

### 5. COMPRESSIVE STRENGTH

The compressive strength of units in pounds per square inch based upon gross area shall be not less than the amount shown in Table I.

### TABLE I

### Compressive Strength

| Direction of Coring | Minimum Average of 5 Units Lbs. Per Sq. In. | Individual Minimum One Unit Lbs. Per Sq. In. |
|---|---|---|
| Vertical | 3000 | 2500 |
| Horizontal | 2000 | 1500 |

## 6. BED DEPTH DIMENSION TOLERANCES

The total variation in the bed depth (through the wall) dimension of units shall be not more than the amount shown in Table II.

### TABLE II

### Permissible Variations in Bed Depth Dimensions

| Standard Bed Depth Dimension (Wall Thickness) | Maximum Difference Between Dimension of Any Unit and the Standard Dimension | | Maximum Difference Between Largest and Smallest Unit in One Lot |
|---|---|---|---|
| | If Larger | If Smaller | |
| Inches | Inch | Inch | Inch |
| 1-3/4 | 1/8 | 2/16 | 2/16 |
| 3-3/4—two face | 1/8 | 2/16 | 2/16 |
| 3-3/4 | 1/8 | 3/16 | 3/16 |
| 5-3/4 | 1/8 | 4/16 | 4/16 |
| 7-3/4 | 1/8 | 5/16 | 5/16 |

NOTE 1. Permissible variations for units having dimensions more than ¼ inch greater than shown in Table II shall be the same as for the next larger dimension.

2. No bed depth greater than 3¾ inches is made in two-faced units, except that some may be furnished with smooth salt glaze back selected for one face only.

3. Variation in the bed depth of individual units is controlled by the limitations on distortion. The thickness of a unit shall be considered either the maximum or minimum thickness, whichever is the farthest from the standard dimension.

## 7. DISTORTION TOLERANCES

The maximum permissible distortion of the plane and the edges of the face of individual units from a plane surface and from a straight line respectively shall not exceed the amount shown in Table III.

### TABLE III

### Permissible Distortion

| Standard Face Dimensions (Height and Length) In Inches | Maximum Permissible Distortion In Inches |
|---|---|
| 2-3/8 x 7-3/4 | 2/32 |
| 5-1/16 x 7-3/4 | 2/32 |
| 5-1/16 x 11-3/4 | 3/32 |
| 3-3/4 x 11-3/4 | 3/32 |
| 7-3/4 x 11-3/4 | 5/32 |

NOTE 1. When convex units are laid upon a plane surface, the apparent variation is greater than the actual variation from the plane of the unit.

2. Distortion tolerances for units having dimensions more than ¼ inch greater than shown in Table III shall be the same as for the next larger dimension.

## 8-A SELECT QUALITY

Select Quality, salt glaze units are designed for use with ¼-inch mortar joints.

**(a) Face Dimension Tolerances.** The total variation in the finished face dimensions of units shall be not more than the amounts shown in Table IV.

### TABLE IV

### Permissible Variations in Face Dimensions

| Standard Face Dimension (Height, Length, Return or Reveal) | Maximum Difference Between Dimension of Any Unit and the Standard Dimension | | Maximum Difference Between Largest and Smallest Unit in One Lot* |
|---|---|---|---|
| | If Larger | If Smaller | |
| Inches | Inch | Inch | Inch |
| 2-3/8 | 1/16 | 3/32 | 3/32 |
| 3-3/4 | 1/16 | 3/32 | 3/32 |
| 5-1/16 | 1/16 | 4/32 | 4/32 |
| 7-3/4 | 1/16 | 5/32 | 6/32 |
| 11-3/4 | 1/16 | 7/32 | 8/32 |

NOTE 1. *Size of lot shall be determined by agreement between the purchaser and the seller.

2. Permissible variations for units having dimensions more than ¼ inch greater than shown in Table IV shall be the same as for the next larger dimension.

**(b) Finish.** The glaze shall be free from chips, blisters, cracks or other imperfections detracting from the appearance of the finished wall when viewed at a distance of 5 feet.

## 8-B STANDARD QUALITY

Standard Quality, salt glaze units are designed for use with ¼-inch mortar joints.

**(a) Face Dimension Tolerances.** The total variation in the finished face dimensions of units shall be not more than the amount shown in Table V.

### TABLE V

### Permissible Variations in Face Dimensions

| Standard Face Dimension (Height, Length, Return or Reveal) | Maximum Difference Between Dimension of Any Unit and the Standard Dimension | | Maximum Difference Between Largest and Smallest Unit in One Lot* |
|---|---|---|---|
| | If Larger | If Smaller | |
| Inches | Inch | Inch | Inch |
| 2-3/8 | 3/32 | 3/32 | 3/32 |
| 3-3/4 | 3/32 | 4/32 | 4/32 |
| 5-1/16 | 3/32 | 5/32 | 5/32 |
| 7-3/4 | 3/32 | 6/32 | 6/32 |
| 11-3/4 | 3/32 | 8/32 | 8/32 |

NOTE 1. *Size of lot shall be determined by agreement between the purchaser and the seller.

2. Permissible variations for units having dimensions more than ¼ inch greater than shown in Table V shall be the same as for the next larger dimension.

**(b) Finish.** The glaze shall be free from chips, blisters, cracks or other imperfections detracting from the appearance of the finished wall when viewed at a distance of 5 feet, except that not more than 30 percent of the units may have slight mechanical and glaze imperfections and small chips.

## FOR SMOOTH UNGLAZED STRUCTURAL FACING TILE

### Gray—Cream—Buff—Manganese and Iron Spot

## 1. WORKMANSHIP

The body of all units shall be of light burning, deaired fire clay, burned as straight and true as careful manufacture can produce. The finished face or faces of all units that will be exposed when in place shall be unglazed with smooth finish and shall be hard burned to produce clear faces and semi-vitreous bodies.

# specifications

## 2. SIZES AND SHAPES

The face sizes of unglazed units and fittings therefor shall be as specified.

## 3. UNIT DESIGN

All unglazed units shall conform to the requirements of Sections 1 to 5, inclusive, of the Physical Requirements of the Facing Tile Institute, as to number of cells, shell and web thickness, scoring and coring.

## 4. SELECT QUALITY

Select Quality, unglazed units are dimensioned for use with ¼-inch and ⅜-inch mortar joints.

**(a) Face Dimension Tolerances.** The total variation in the finished face dimensions of units shall be not more than the amount shown in Table I.

### TABLE I

### Permissible Variations in Face Dimensions

| Standard Face Dimension (Height, Length, Return or Reveal) | | Maximum Difference Between Dimension of Any Unit and the Standard Dimension | | Max. Difference Between Largest and Smallest Unit in One Lot* |
|---|---|---|---|---|
| Joint Width | | | | |
| ⅜-inch | ¼-inch | If Larger Inch | If Smaller Inch | Inch |
| 3-5/8 | 3-3/4 | 3/32 | 4/32 | 4/32 |
| 5 | 5-1/16 | 3/32 | 5/32 | 5/32 |
| 7-5/8 | 7-3/4 | 3/32 | 6/32 | 6/32 |
| 11-5/8 | 11-3/4 | 3/32 | 8/32 | 8/32 |

NOTE 1. *Size of lot shall be determined by agreement between the purchaser and the seller.

2. Permissible variations for units having dimensions more than ⅜ inch greater than shown in Table I shall be the same as for the next larger dimension.

**(b) Bed Depth Dimension Tolerances.** The total variation in bed depth (through the wall) dimension of units shall be not more than the amount shown in Table II.

### TABLE II

### Permissible Variations in Bed Depth Dimensions

| Standard Bed Depth Dimension (Wall Thickness) | | Maximum Difference Between Dimension of Any Unit and the Standard Dimension | | Max. Difference Between Largest and Smallest Unit in One Lot |
|---|---|---|---|---|
| Joint Width | | | | |
| ⅜-inch | ¼-inch | If Larger Inch | If Smaller Inch | Inch |
| 1-5/8 | 1-3/4 | 1/8 | 2/16 | 2/16 |
| 3-5/8 | 3-3/4—two face | 1/8 | 2/16 | 2/16 |
| 3-5/8 | 3-3/4 | 1/8 | 3/16 | 3/16 |
| 5-5/8 | 5-3/4 | 1/8 | 4/16 | 4/16 |
| 7-5/8 | 7-3/4 | 1/8 | 5/16 | 5/16 |

NOTE 1. Permissible variations for units having dimensions more than ⅜ inch greater than shown in Table II shall be the same as for the next larger dimension.

2. Variation in the bed depth of individual units is controlled by the limitations on distortion. The thickness of a unit shall be considered either the maximum or minimum thickness, whichever is the farthest from the standard dimension.

**(c) Distortion Tolerances.** The maximum permissible distortion of the plane and the edges of the face of individual units from a plane surface and from a straight line respectively shall not exceed the amount shown in Table III.

### TABLE III

### Permissible Distortion

| Standard Face Dimensions (Height and Length) In Inches Joint Width | | Maximum Permissible Distortion In Inches |
|---|---|---|
| ⅜-inch | ¼-inch | |
| 5 x 7-5/8 | 5-1/16 x 7-3/4 | 3/32 |
| 5 x 11-5/8 | 5-1/16 x 11-3/4 | 4/32 |
| 3-5/8 x 11-5/8 | 3-3/4 x 11-3/4 | 4/32 |
| 7-5/8 x 11-5/8 | 7-3/4 x 11-3/4 | 6/32 |

NOTE 1. When convex units are laid upon a plane surface, the apparent variation is greater than the actual variation from the plane of the unit.

2. Distortion tolerances for units having dimensions more than ⅜ inch greater than shown in Table III shall be the same as for the next larger dimension.

**(d) Finish.** The finished face or faces that will be exposed when in place shall be free from chips in excess of those permitted by Table IV and shall be free from other imperfections detracting from the appearance of the finished wall when viewed at a distance of 10 feet.

### TABLE IV

### Chippage in Inches

| | Maximum Permissible Chippage, in Inches* |
|---|---|
| In from edge | 1/8 |
| In from corner | 1/4 |

*Maximum permissible extent of chippage from the edges and corners of a unit into the surface of the stretcher and one header face. Not to exceed 5 percent of any shipment may have chippage in excess of the allowance in Table IV, but not in excess of 3/16 inch and 5/16 inch from edge and corner respectively.

**(e) Color and Texture.** The texture shall be smooth and the color of the finished surface shall conform to an approved sample consisting of 5 stretcher units fully representing the range of shade. For colors see page 27.

**(f) Compressive Strength.** The compressive strength of units in pounds per square inch based upon gross area shall be not less than the amount shown in Table V.

### TABLE V

### Compressive Strength

| Direction of Coring | Minimum Average of 5 Units Lbs. Per Sq. In. | Individual Minimum One Unit Lbs. Per Sq. In. |
|---|---|---|
| Vertical | 3000 | 2500 |
| Horizontal | 2000 | 1500 |

**(g) Absorption.** The average absorption of 5 units by 24-hour submersion in cold water shall not exceed 5 percent and the absorption of any single unit shall not exceed 7 percent.

## FOR OFF-QUALITY STRUCTURAL FACING TILE

### All Types, Glazed and Unglazed, Commercial or Off-Quality

**(a)** This Quality consists of yard accumulations, has the same method of manufacture and the same type of finish as the corresponding Select or Standard Qualities.

**(b)** This Quality will have glaze defects and mechanical and face imperfections and chips.

**(c)** The shade range of this Quality will be wider than that of approved samples of Select or Standard Quality.

**(d)** Units in this Quality may not pass the tests for Select or Standard Qualities.

**(e)** This Quality may have greater tolerances than for Standard Quality.

**(f)** This Quality sold only subject to stock accumulation and prior sale.

## RECOMMENDED PACKING FOR STRUCTURAL FACING TILE

### GLAZED AND UNGLAZED

1. The industry uses four standard methods of packing its products.

   a. **Paper cartons or trays**
   b. **Loose in straw or hay**
   c. **Double cartons (packages)**
   d. **Wire bound boxes, crates or barrels**

2. It is recommended that (a) packing be used for Ceramic Glaze, Select Quality; Clear Glazed, Select and Standard Qualities; Salt Glaze, Select and Standard Qualities, and that (b) packing be used for all other types and qualities.

## PHYSICAL REQUIREMENTS FOR STRUCTURAL FACING TILE

### GLAZED AND UNGLAZED

### 1. TYPE OF UNITS

Units may be multicored, hollow or uncored.

Solid masonry unit (multicored or uncored) is a masonry unit whose net cross-sectional area in every plane parallel to the bearing surface is 75 percent or more of its gross cross-sectional area measured in the same plane.

Hollow masonry unit is a masonry unit whose net cross-sectional area in any plane parallel to the bearing surface is less than 75 percent of its gross cross-sectional area measured in the same plane.

### 2. NUMBER OF CELLS

Requirements as to number of cells apply to hollow units only. Cells are hollow spaces enclosed within the perimeter of the exterior shells having a minimum dimension of not less than ½ inch and a cross-sectional area of not less than 1½ square inches.

Hollow units of 6-inch and 8-inch thickness shall have not less than 2 cells or rows of cells in the direction of wall thickness.

Double shell tile shall be considered as having one additional cell in the direction of wall thickness if either:

(a) The combined width of the voids between exterior and interior shells on both sides of the tile is not less than ½ inch and the combined thickness of the short webs between the inner and outer shells is not greater than that of the long transverse webs holding the inner shells, or

(b) The combined thickness of the inner and outer shells on each side of the tile is not less than 1 inch.

The face shells of single shell tile with multicored or solid face shells at least 1½ inches thick on both sides of the tile shall be considered as one additional cell in wall thickness, provided the volume of the cores in multicored shells does not exceed 35 percent of the gross volume of the face shell and the minimum distance from perimeter of core to either side of shell is not less than ⅜ inch.

### 3. SHELL AND WEB THICKNESS

(a) Multicored units. The minimum distance from the perimeter of core to the side (face) of multicored units shall be not less than ¾ inch.

(b) Hollow units. The average overall thickness of the shells, measured between the inner and extreme outer surfaces of vertical cell hollow units, shall be not less than ¾ inch. The thickness of the webs shall be not less than ½ inch.

The overall thickness of the side (face) shells, measured between the inner and extreme outer surfaces of horizontal cell hollow units shall be not less than ¾ inch. The net thickness of the top and bottom shells shall be not less than ½ inch; that is, when the top and bottom shells are scored, the overall thickness of the top and bottom shells shall be not less than ½ inch plus the depth of the grooves. The thickness of the webs shall be not less than ½ inch.

### 4. SCORING

Unless otherwise specified by the purchaser, smooth or scored back glazed units or a mixture thereof may be furnished and smooth, combed or roughened back unglazed units or a mixture thereof may be furnished.

When scored, each groove shall be dovetailed and shall be not less than 1/16 inch nor more than ¼ inch in depth, and not more than 1 inch in width. The area covered by the grooves shall not exceed 50 percent of the area of the scored faces.

When combed, the tile shall be scratched or scarified, prior to burning, by mechanical means which shall make scratches or scarifications on the surface of the tile not less than 1/16 inch nor more than ⅛ inch in depth, and not more than ¼ inch apart. When roughened, the die skin on the face of the tile shall be entirely broken by mechanical means, such as wire cutting or wire brushing. (The die skin may be observed within the cells of the tile.)

### 5. CORING

Type and direction of coring are optional with each manufacturer. Unless heavy units (priced in relation to excess weight and cost) are definitely required, maximum percent of coring is fixed by the requirements of Sections 2 and 3. Heavy duty units may be either solid or cored not to exceed the maximums shown below:

| Standard Thickness Inches | Maximum Percent Coring |
|---|---|
| 3¾ | 25 |
| 5¾ | 35 |
| 7¾ | 35 |

Percent of coring shall be taken as the percent of the gross volume of the unit removed by coring. Gross volume of the unit shall be determined to the outside of the scoring, but the material removed by scoring shall not be considered as part of the coring.

## FIRE RESISTANCE PERIODS FOR VARIOUS TYPES OF CLAY MASONRY WALLS AND PARTITIONS

The standard fire test procedure to determine fire resistance periods for masonry construction is described in the "Standard Methods of Fire Tests of Building Construction and Materials", Designation ASA No. A2.1 of the American Standards Association, and adopted as standard by the American Society for Testing Materials, Designation E119.

These specifications prescribe a fire endurance test which consists of exposing one side of the panel specimen to a standard high-intensity fire of controlled extent and severity. The performance is defined as the elapsed period before the first critical point in behavior is observed. This may be (1) the passage of flame or gas hot enough to ignite cotton waste during the fire endurance test, or (2) the passage of water during the hose stream test, or (3) the transmission of heat through the wall or partition during the fire endurance test shall not be such as to raise the temperature on its unexposed surface more than 250° F. above its initial temperature.

Results of fire tests on structural tile walls and partitions and composite walls of brick and tile are reported in National Bureau of Standards Report BMS92, "Fire Resistance Classifications of Building Construction", October 1942, and reproduced in Tables I and II for various typical units. The fire resistance ratings listed in Table III are based upon standard fire tests conducted at Ohio State University.

### TABLE I

### Load-Bearing Brick Faced Walls of Clay, or Shale, Structural Tile

| Nominal Wall Thickness | Description | Ultimate Fire-Resistance Period | |
|---|---|---|---|
| | | No Plaster | Plaster Inside |
| in. | | hr. | hr. |
| 8 | 4-in. 40 percent solid tile plus 4-in. brick face. | 3-1/2 | 4 |
| 12 | 8-in. 40 percent solid tile plus 4-in. brick face. | 6 | 7 |
| 12 | 8-in. 70 percent solid tile plus 4-in. brick face. | 10 (a) | (a) |

(a) Based on wall failure under load. If based on temperature rise, the ultimate fire-resistance period would be 11 hr. for the unplastered wall and 12 hr. for the wall plastered on one side.

NOTE: Not less than 5/8-in. of 1:3 sanded gypsum plaster required to develop the above ratings for plastered walls.

### TABLE III

### Structural Facing Tile Partitions

| Nominal Wall Thickness, Inches | Description | Ultimate Fire Resistance |
|---|---|---|
| 6 | Glazed or unglazed facing tile cored not in excess of 25 percent, 2 units in wall thickness | 3 hours |
| 6 | 2 inches glazed or unglazed facing tile cored not in excess of 25 percent and 4 inches structural tile cored not in excess of 40 percent, plastered on unglazed side with ¾ inch gypsum sand plaster (1:3 by volume). | 3 hours |
| 4 | Glazed or unglazed facing tile cored not in excess of 25 percent, plastered on unglazed side with ¾ inch of gypsum sand plaster (1:3 by volume). | 2 hours |
| 4 | Glazed or unglazed facing tile cored not in excess of 30 percent, plastered on unglazed side with ¾ inch vermiculite plaster. | 2 hours |
| 4 | Glazed or unglazed facing tile meeting requirements of ASTM Specifications for Structural Clay Load-Bearing Wall Tile, C34, except that the shells of solid shell horizontal cell units shall be not less than ¾ inch thick, plastered on unglazed side with ¾ inch gypsum sand plaster (1:3 by volume). | 1 hour |

NOTE: All plastered partitions plastered on unexposed side.

### TABLE II

### Load-Bearing Walls of Clay, or Shale, Structural Tile

| Nominal Wall Thickness | Units In Wall Thickness | Cells In Wall Thickness | Minimum Percentage of Solid Materials In Units (a) | Ultimate Fire-Resistance Period | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Incombustible Members Framed Into Wall or No Framed-in Members | | | Combustible Members Framed Into Wall | |
| | | | | No Plaster | Plaster On One Side | Plaster On Two Sides | No Plaster | Plaster On Exposed Side |
| in. | | | | hr. | hr. | hr. | hr. | hr. |
| 8 | 1 | 2 | 43 | 1-1/2 | 2 | 3 | 3/4 | 1-1/2 |
| 8 | 1 | 2 | 49 | 2 | 3 | 4 | 1-1/4 | 2 |
| 8 | 1 | 3 or 4 | 43 | 2 | 3 | 4 | 3/4 | 1-1/2 |
| 8 | 1 | 3 or 4 | 53 | 3 | 4 | 5 | 1-1/4 | 2 |
| 12 | 1 | 3 | 40 | 2-1/2 | 3-1/2 | 4 | 2 | 3 |
| 12 | 1 | 3 | 49 | 3-1/2 | 4 | 6 | 3 | 4 |
| 12 | 2 | 3 or 4 | 45 | 4 | 5 | 6 | 2-1/2 | 3-1/2 |
| 12 | 2 | 3 or 4 | 53 | 5 | 6 | 7 | 3 | 4 |

(a) The percentage of solid material units given above, in the case of walls built up of units of different designs, is to be taken as the weighted average for the units at the courses in the wall where the average percentage is the lowest.

NOTES: All tile is to conform with ASTM specifications from the standpoint of strength and absorption.
Not less than 5/8-in. of 1:3 sanded gypsum plaster is required to develop the above ratings for plastered walls.

# METHODS OF TESTS FOR STRUCTURAL FACING TILE

## GLAZED AND UNGLAZED

### 1. SAMPLING AND INSPECTION

For the imperviousness, chemical resistance, crazing, opacity, compression and absorption tests, at least ten units shall be selected by the purchaser or his authorized representative.

Ten stretcher units shall be tested for a lot of 10,000 units or fraction thereof; for larger lots, ten additional specimens may be tested for each 30,000 units or fraction thereof. When less than 1,000 units of any size are ordered no samples shall be required.

The purchaser or his authorized representative shall be accorded opportunity for sampling and inspecting units at the place of manufacture, prior to shipment. At least ten days from the time of sampling should be allowed for completion of the tests. The expense of the inspection and testing shall be borne by the purchaser.

### 2. IMPERVIOUSNESS TEST

Standard blue-black fountain pen ink shall be applied liberally to the glazed surface of five dry specimens and allowed to remain for five minutes. The surface shall then be washed with a wet cloth and running water, and examined at a distance of five feet for staining of the finish.

### 3. CHEMICAL RESISTANCE TEST

A portion of the glazed surface of two of the specimens shall be submerged in a 10 per cent solution of hydrochloric acid for three hours. Another portion of the glazed surface of the same specimens shall be submerged in a 10 per cent solution of potassium hydroxide for three hours. These solutions shall be maintained at a temperature of 60 to 80° F. (15 to 27° C.). The finishes shall then be rinsed, dried and examined for changes of texture and color.

### 4. CRAZING TEST

The crazing test shall be made on three whole dry units previously tested for imperviousness of finish. Specimens subjected to the chemical resistance test shall not be used.

The autoclave shall be of sufficient capacity to contain all the units of the same texture, color and size. The apparatus shall be equipped with a safety valve, blow-off valve, and pressure gauge whose accuracy is within 2 per cent of the scale range, and a heater of sufficient capacity to insure constant steam pressure within the autoclave.

The specimens shall be loosely placed above the water in the autoclave at room temperature. After fastening the autoclave head in place, the water in the bottom shall be heated from an external source. The blow-off valve shall be kept open until steam begins to escape, thereby expelling most of the air. After closing the blow-off valve, the water shall be kept boiling and the steam pressure increased at a uniform rate until 150 lbs. per square inch of pressure is reached within a period of not less than 60 minutes or exceeding one and one-half hours. Sufficient heat shall be applied to maintain a constant steam pressure of 150 lbs. per square inch (plus or minus 5 lbs.) for an additional hour.

The heater shall then be shut off and the steam pressure released slowly in not less than 30 minutes by opening the blow-off valve. The autoclave head shall be loosened, but not removed, and the specimens permitted to cool gradually to room temperature (not exceeding 120° F.) in a period not less than three hours. The specimens shall then be removed and standard blue-black fountain pen ink rubbed upon the glazed surfaces to aid in the detection and examination of failures.

**Alternate Method of Test:** As an alternate method, saturated live steam may be used to supply the pressure required. The steam pressure supply shall be maintained at a minimum of 150 lbs. per square inch. The apparatus shall be equipped with a control valve and a bleeder valve. The bleeder valve shall be so located as to maintain a constant water level below the supports of the specimens.

By constant manipulation of the control valve, steam shall be emitted into the autoclave at a rate which uniformly raises and maintains the pressure on the specified schedule. During the test, the bleeder valve shall be left open slightly to maintain the constant water level.

The pressure shall be released according to the specified schedule by manipulation of the bleeder valve.

Other than control, the specifications shall be the same as for the externally heated apparatus.

It is advisable to have a "bleeder" on the live steam feed line to eliminate the condensate in the feed line before starting the test.

### 5. OPACITY TEST

The opacity test shall be conducted on three dry specimens by applying standard blue-black fountain pen ink liberally to the body along a 2 inch length of the edge of the finished surface. After five minutes, the finish shall be examined for opacity.

When the same three specimens are to be subjected to the opacity and crazing tests, the opacity test shall be made first.

### 6. ABSORPTION TEST

The absorption test shall be made on five whole specimens or on five pieces containing not less than 16 square inches of glazed surface and of the thickness of the body, cut or sawed from five specimens. When the same specimens are to be subjected to the absorption and crazing tests, the absorption test shall be made first. The absorption test shall be made in accordance with the Standard Methods of Sampling and Testing Brick (A.S.T.M. Designation C67—) of the American Society for Testing Materials.

### 7. COMPRESSION TEST

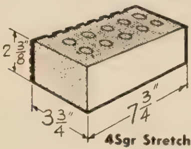
Compression tests shall be made on five samples in accordance with the Standard Methods of Sampling and Testing Brick (A.S.T.M. Designation C67—) of the American Society for Testing Materials.

The same specimens used in the crazing test shall not be used in the compression test. When the same specimens are to be subjected to the absorption and compression tests, the specimens shall be dried to constant weight before subjecting them to the compression test.

This series is not furnished by all producers except as shown on pages 12 to 16 inclusive as coursing units.

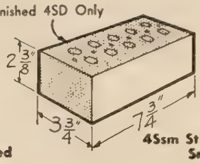
# NOMINAL 2⅔" x 8" FACE "4S" SERIES

## STRETCHER GROUP



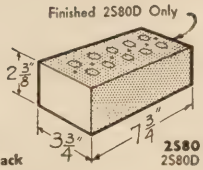
**4Sgr Stretcher, Scored Back**

Finished 4SD Only

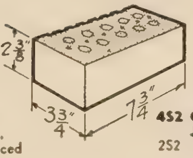


**4Ssm Stretcher, Smooth Back**
4SD Stretcher, Two Faced

Finished 2S80D Only

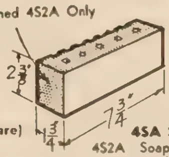


**2S80 Header**
2S80D Header, Two Faced



**4S2 Quoin (Square) Jamb**
2S2 Same, Half

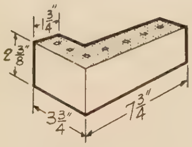
Finished 4S2A Only



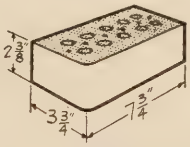
**4SA Soap Stretcher**
4S2A Soap, Quoin (Square) Jamb, 2" Return

**Unless job conditions require either SMOOTH or SCORED BACK STRETCHERS, shipment may be facilitated by ordering 4S Stretchers, thereby permitting manufacturer to ship either the scored or smooth back stretchers or a mixture. Type and direction of SCORING and CORING are optional with each manufacturer.**

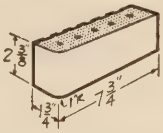
## JAMBS, CORNERS & OCTAGONS — Group I Shapes



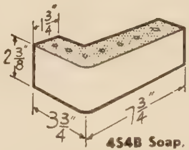
**4S2B Soap, Quoin (Square) Jamb, 4" Return**



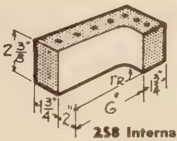
**4S4 Bullnose Jamb**
2S4 Same, Half



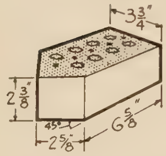
**4S4A Soap, Bullnose Jamb, 2" Return**



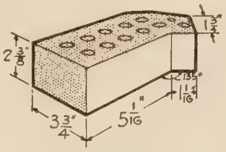
**4S4B Soap, Bullnose Jamb, 4" Return**



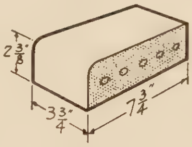
**2S8 Internal Coved Corner**



**4S6 External Octagon**
4S6A Soap, External Octagon

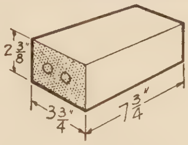


**2S9 Internal Octagon**
3S9A Soap, Internal Octagon

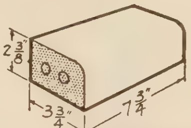


**2S280 Bullnose Sill Header**
2S180 Square Sill Header

## SILL STRETCHERS — Group II



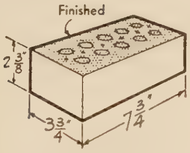
**4S10 Square Sill or Cap, 4" Reveal**



**4S20 Bullnose Sill or Cap, 4" Reveal**
4S20A Soap, Bullnose Sill or Cap, 2" Reveal

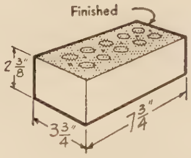
## WALL ENDS & RECESSED LINTELS — Group III Shapes

Finished



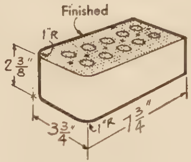
**4S3 Quoin (Square) End, 4" Wall**
2S3 Same, Half

Finished



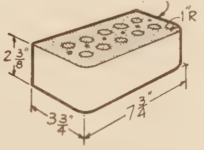
**2S83 Quoin (Square) End, 8" Wall**

Finished

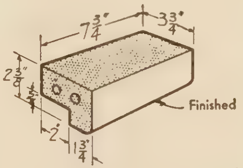


**4S5 Bullnose End, 4" Wall**
2S5 Same, Half

Finished

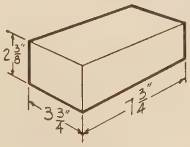


**2S85 Bullnose End, 8" Wall**

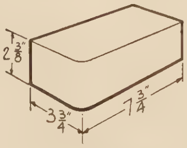


**4S720 Recessed Bullnose Lintel**
4S710 Recessed Square Lintel

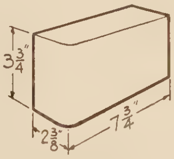
## FITTINGS FOR ABOVE — Group IV Shapes



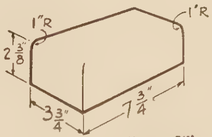
**4S12CR Square Sill or Cap, Quoin (Square) Corner, Right**



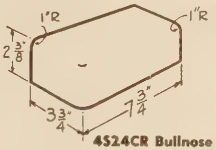
**4S14CR Square Sill Starter, Bullnose Corner, Right**



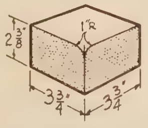
**4S15R Square Rowlock Sill Starter Bullnose Corner, Right**



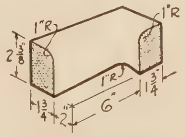
**4S22CR Bullnose Sill or Cap, Quoin (Square) Corner, Right**



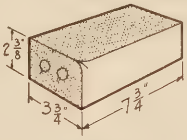
**4S24CR Bullnose Sill or Cap, Bullnose Corner, Right**



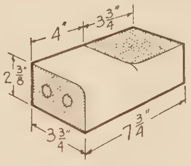
**2S27H Bullnose Sill or Cap, Internal Square Corner, Half**



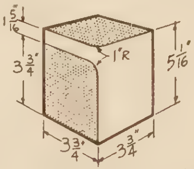
**3S28L Bullnose Sill or Cap, Internal Coved Corner, Left**



**4S30R Bullnose Miter, Right**

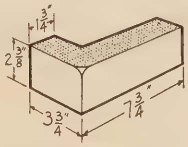


**4S31R Bullnose Sill Miter, Right**

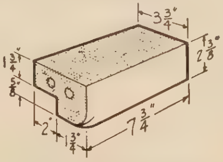


**2S34R Bullnose Rowlock Sill and Jamb Miter, Right**

SILL SHAPES, shown above, are popular as cap and coping shapes.



**4S304R Bullnose Sill Starter, Bullnose Jamb, Right**



**4S730R Recessed Bullnose Lintel Miter, Right**

For Radial Shapes, See Page 15 — captions below "4D" Series Radials.
For Box Cap-Mold Shapes, See Pages 12 – 22
An extra charge is made for cutting lengths or heights other an those shown or listed.
A power driven saw should be used for all cutting on the job
Nominal dimensions are usually given for returns, reveals, etc., 2" is actually 1¾" and 4" is actually 3¾" and 6" is actually 5¾"
Cove Base units are not made in one-brick equivalents. For Cove Base units to be used with Series "4S" see following pages.
Number with suffix R denotes right hand shape. Similar left hand shape takes suffix L.

# NOMINAL 5⅓" x 8" FACE "4D" SERIES

This series not furnished by all producers.

## STRETCHER

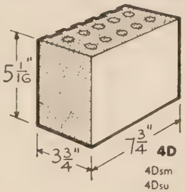
| 4" BED OR REVEAL | 2" BED OR REVEAL | 6" BED OR REVEAL | 8" BED OR REVEAL |
|---|---|---|---|

### FIELD

Group

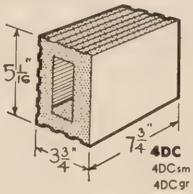
Stretcher

Scored or unscored



**4D**

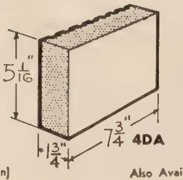
4Dsm
4Dsu
4Dgr (shown)
Also Available
4S—2⅜" high



**4DC**

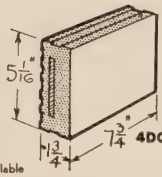
4DCsm
4DCgr (shown)
4DCsu

Soap



**4DA**

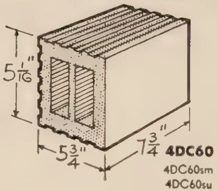
Also Available
4SA—2⅜" high



**4DCA**

6" Stretcher

Scored or unscored

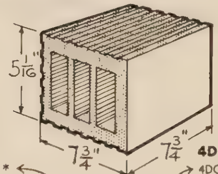


**4DC60**

4DC60sm *
4DC60su
4DC60gr (shown)

* Not made Ceramic or Clear Glaze

8" Stretcher



**4DC80**

4DC80sm *
4DC80su
4DC80gr (shown)

Shipments may be facilitated by simply ordering stretchers (**EXAMPLE 4D or 4DC**), thereby permitting the manufacturer to ship either the scored or smooth back stretchers, or a mixture. If job conditions require that the back be of a certain type, they may be obtained by ordering the following: sm—unselected glazed back; in unglazed, smooth back, selected one face; su—unselected, unscored, unglazed back; gr—scored or grooved back. Type and direction of SCORING and CORING are optional with the manufacturer. In general, the manufacturer standardizes on either the horizontal or vertical coring and does not supply both.

### SILL, CAP OR LINTEL

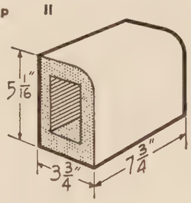
#### SQUARE

Group II **4D10** — II **4D10A** Solid or open back — III **4D160** — III **4D180**

SAME AS BELOW BUT SQUARE INSTEAD OF BULLNOSE

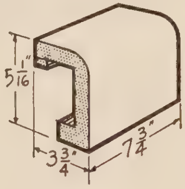
#### BULLNOSE

Group II



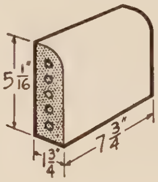
**4D20**

II



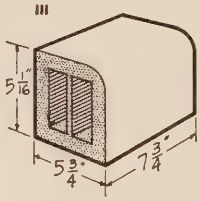
**4D20B**

II



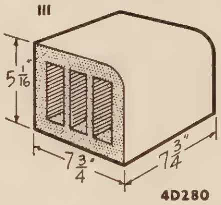
**4D20A**

III



**4D260**

III

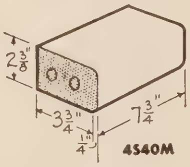


**4D280**

### BOX CAP-MOLD

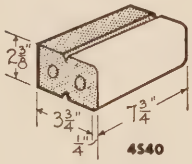
* Cut on the job.

Group III



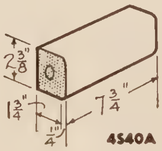
**4S40M**

II

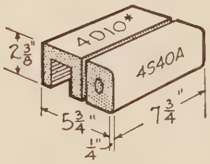


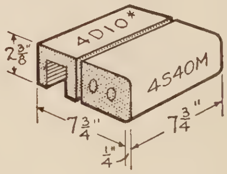
**4S40**

II



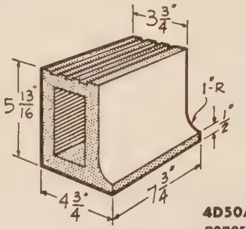
**4S40A**





### COVE BASE

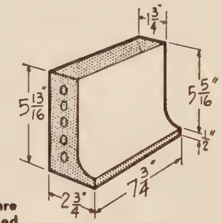
Group III



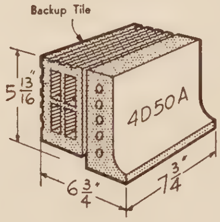
**4D50**

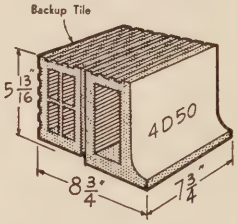
4D50A units are generally used with stretchers

II



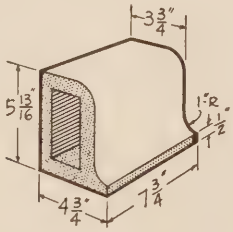
**4D50A**





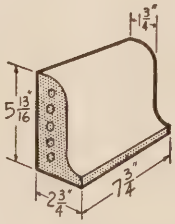
### ROUND TOP COVE BASE

Group IV

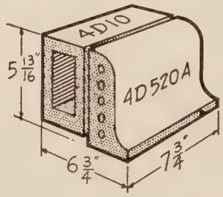


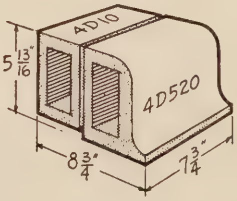
**4D520***

III



**4D520A***





* Round top cove base not made unglazed

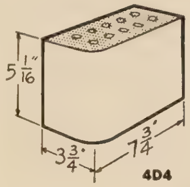
This series not furnished by all producers.

# NOMINAL 5⅓" x 8" FACE "4D" SERIES

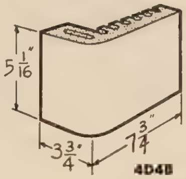
## BULLNOSE CORNER OR JAMB, AND STARTER

### 4" RETURN OR SOAP (4" RETURN) STARTER SOAP (2" RETURN)

Group I I I



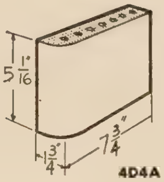
**4D4**
3D4—5¾" length
2D4—3¾" length
Also Available
4S4—2⅜" high



**4D4B**
Also Available
4S4B—2⅜" high

**Note: Nominal dimensions are usually given for returns, reveals, lengths, etc., — 2" is actually 1¾", 4" is actually 3¾", 6" is actually 5¾", 8" is actually 7¾", 10" is actually 9¾", 12" is actually 11¾". However, all dimensions shown on shape drawings are actual.**

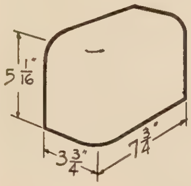
**An extra charge is made for cutting lengths or heights other than those shown or listed.**



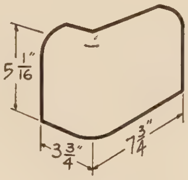
**4D4A**

**A power driven saw should be used for all cutting on the job.**

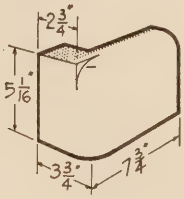
Group V IV IV IV



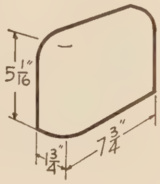
**4D24CR**



**4D24R**

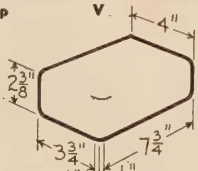


**4D24X2R**

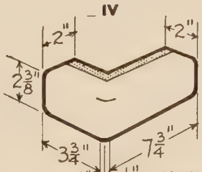


**4D24AR**

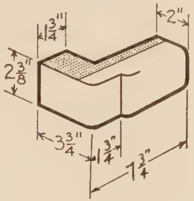
Group V IV IV



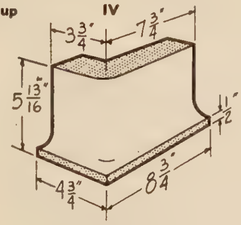
**4S44MR**



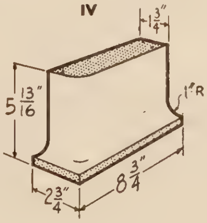
**4S44BR**



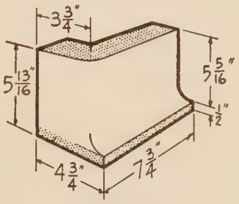
Group IV IV IV



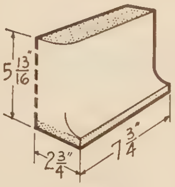
**4D54R**



**4D54AR**

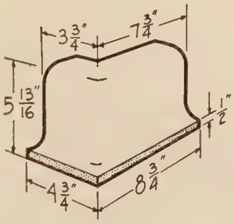


**4D504R**

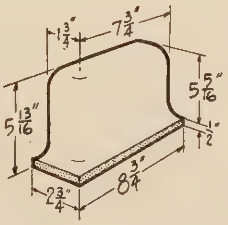


cut on the job from
4D504R

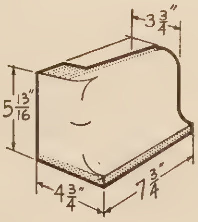
Group V V V



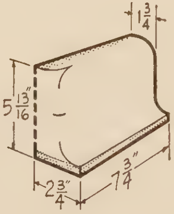
**4D524R***



**4D524AR***



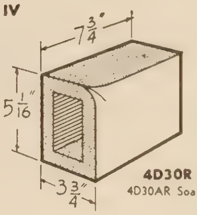
**4D5204R***



Cut on the job from
4D5204R *

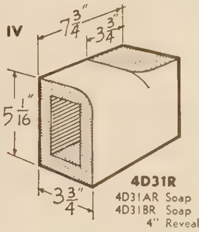
## MITER

IV



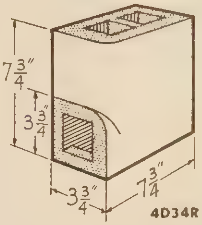
**4D30R**
4D30AR Soap

IV



**4D31R**
4D31AR Soap
4D31BR Soap
4" Reveal

V

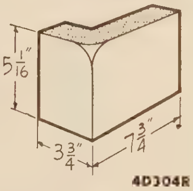


**4D34R**
4D34AR Soap
4D34BR Soap
4" Return

**Miters shown above may be used for sills, lintels, or jams.**

## STARTER

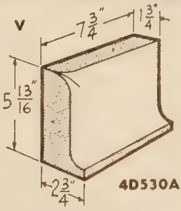
IV



**4D304R**

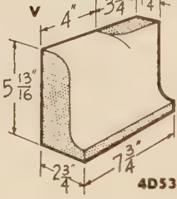
**Use with slope sills and bullnose jams.**

V



**4D530AR***

V



**4D531R***

Number with suffix R denotes right hand shape. Similar left hand shape takes suffix L.

*Round top cove base not made unglazed

# NOMINAL 5⅓" x 8" FACE "4D" SERIES

This series not furnished by all producers.

## 4" WALL—GLAZED BOTH SIDES

**STRETCHER** · **FULL END** · **HALF END**

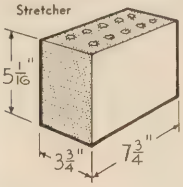
## 6" WALL—GLAZED BOTH SIDES

**STRETCHER** · **FULL END**

### FIELD

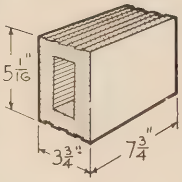
Group

Two Faced Stretcher



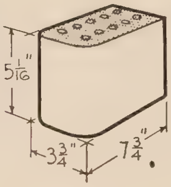
**4DD**

Also Available
4SD —2⅜" high



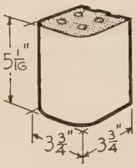
**4DCD**

III

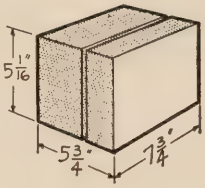


**4D5**

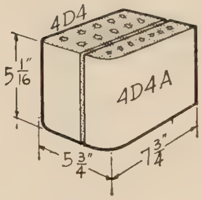
III



**2D5**

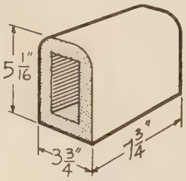


Note: Supplied as one unit in salt glazed and unglazed—as 4D60D or 4DC60D.



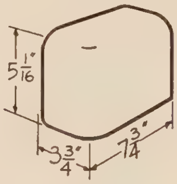
### BULLNOSE SILL, CAP OR LINTEL

Group III



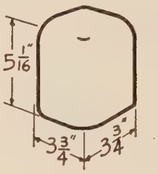
**4D20D**
Same square edge 4D10D

VI



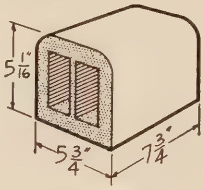
**4D25**

VI

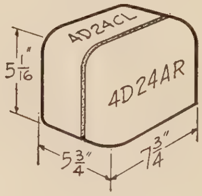


**2D25**

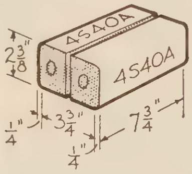
IV

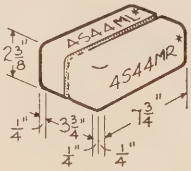


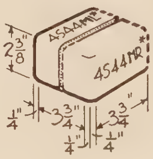
**4D260D**
Same square edge 4D160D

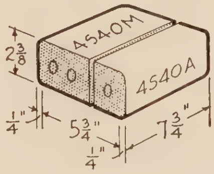


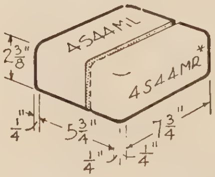
### BOX CAP-MOLD





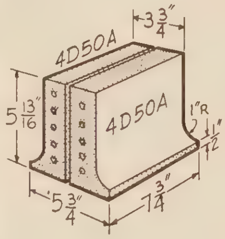


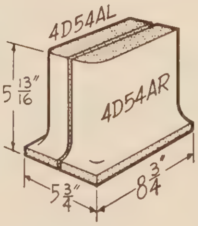


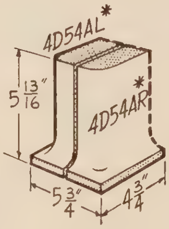


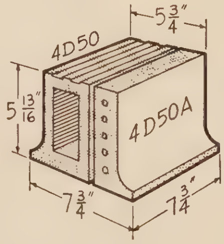
* Cut on the job.

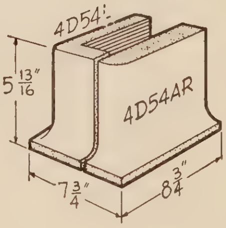
### COVE BASE



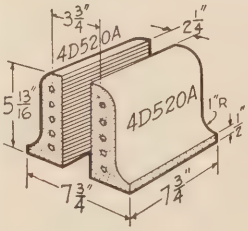


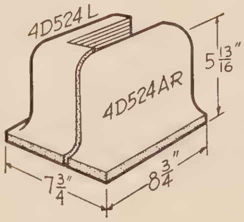


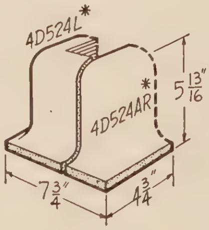


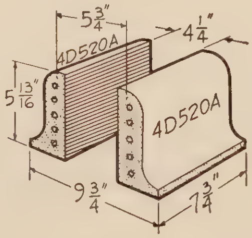


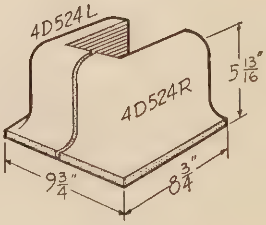
### ROUND TOP COVE BASE











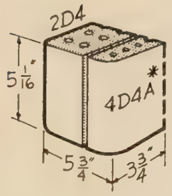
*Round top cove base not made unglazed

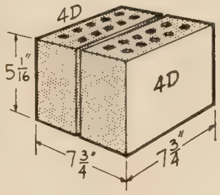
This series not furnished by all producers.

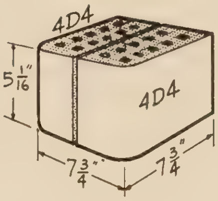
# NOMINAL 5⅓" x 8" FACE "4D" SERIES

| 6" WALL | 8" WALL—GLAZED BOTH SIDES | | | STANDARD RADIALS | |
|---|---|---|---|---|---|
| HALF END | STRETCHER | FULL END | HALF END | STRETCHER | STARTER |

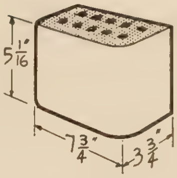
Group





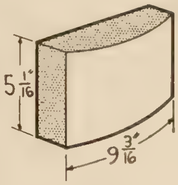


III



**2D85**

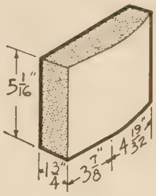
III



**5T90**

Also available 5S90—2⅜" high

V



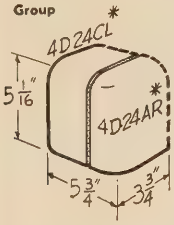
**4D91**

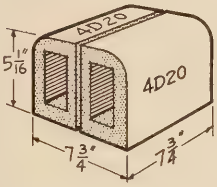
Also Available 4S91—2⅜" high

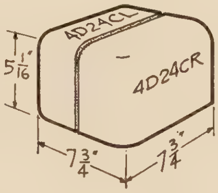
* Cut on the job.

**Note: INTERNAL radial shapes are similar in numbering and dimensioning. In ordering by number simply prefix the letter, "I" to the corresponding external shape number. Internal radial shapes are manufactured for a radius of 48" as standard.**

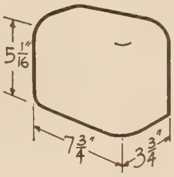
Group





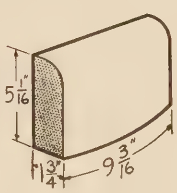


VI



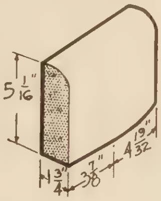
**2D285**

V



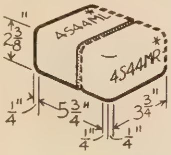
**5T920**

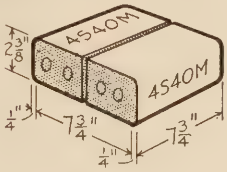
VII

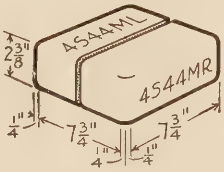


**4D921L**

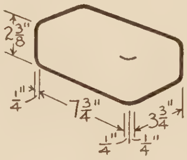
Group





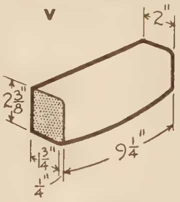


VI



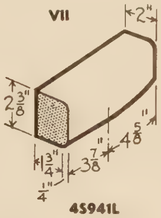
**2S485**

V

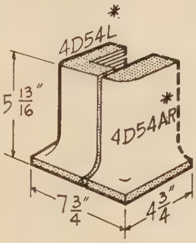


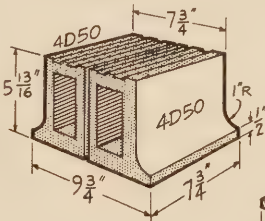
**5S940**

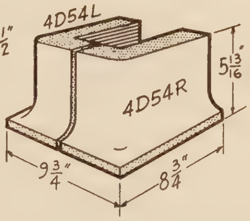
VII

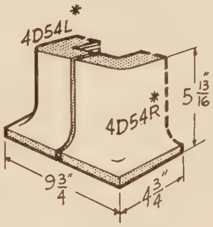


**4S941L**

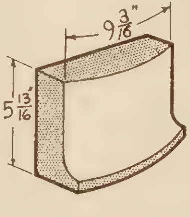






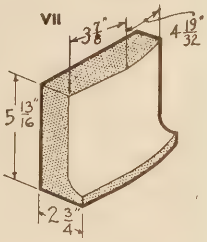


V



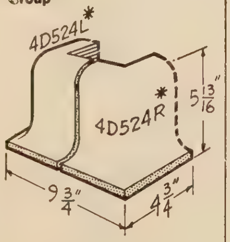
**5T950**

VII



**4D951L**

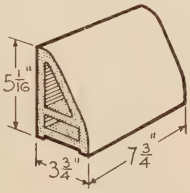
Group



## SLOPE SILLS

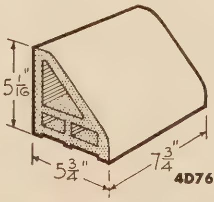
When used with bullnose jambs, use shapes 4D304R/L as starters

III



**4D70**

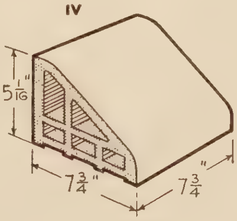
IV



**4D760**

Note: Slope sills also available in nominal 4" 6⅔" and 8" heights. See Page 17

IV



**4D780**

NOTE: Standard external radii for the above shapes are 12" and 24" Standard internal radius is 48". In ordering, prefix radius in inches to shape number (Example: 24-5T90 would be a field stretcher for a 24" external radius). Non-standard radii in increments of 6" will be furnished.

Special dies required must be provided by the purchaser and non-standard radii, group III shapes will be group VI, group V shapes will be group X, and group VII shapes will be group XIV.

# NOMINAL 5⅓" x 8" FACE "4D" SERIES

This series not furnished by all producers.

**QUOIN (SQUARE) JAMB OR STARTER** — **4" RETURN OR SOAP (4" RETURN)**

**SQUARE INTERNAL CORNER** — **4" OR 2" BED**

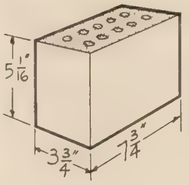
**COVED INTERNAL CORNER**

**OCTAGONAL EXTERNAL CORNER**

**OCTAGONAL INTERNAL CORNER**

## FIELD

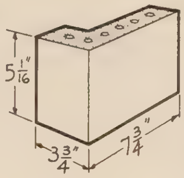
Group I



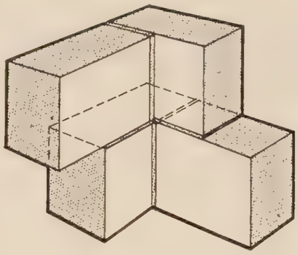
**4D2**

2D2—3¾" length

I

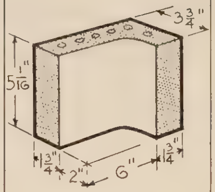


**4D2B**



Use regular stretchers or soaps for the field

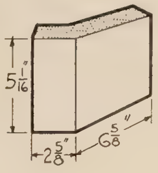
I



**3D8**

Also Available 3S8—2⅜" high

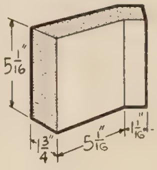
I



**4D6**

Also Available 4S6A—2⅜" high

I

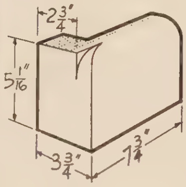


**3D9**

Also Available 3S9A—2⅜" high

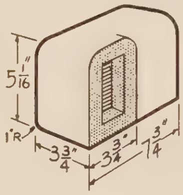
## BULLNOSE SILL, CAP OR LINTEL

Group Starter IV



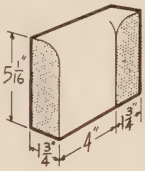
**4D22X2R**

V 4" Reveal



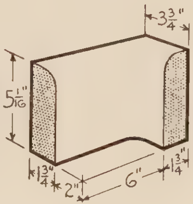
**4D24X27R**

IV 2" Reveal



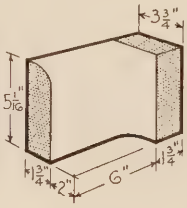
**2D27L**

IV



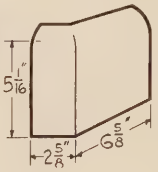
**3D28L**

IV



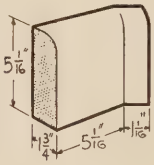
**3D208L**

IV



**4D26R**

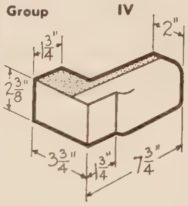
IV



**3D29L**

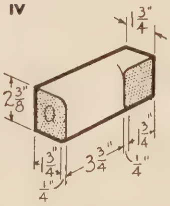
## BOX CAP-MOLD

Group IV



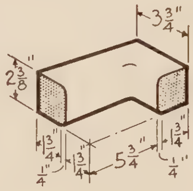
**4S402R**

IV



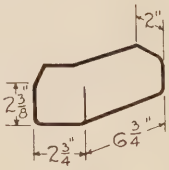
**2S47L**

IV



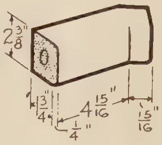
**3S48L**

IV



**4S46R**

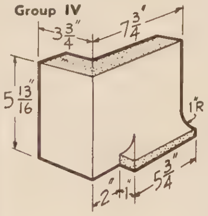
IV



**3S49L**

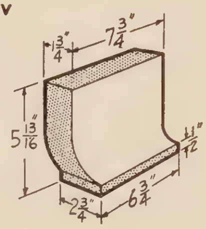
## COVE BASE

Group IV



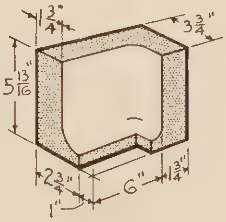
**4D502R**

IV



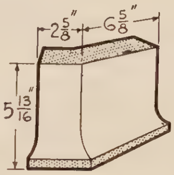
**4D57R**

IV



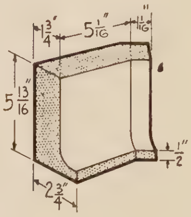
**3D58L**

IV



**4D56R**

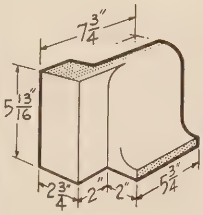
IV



**3D59L**

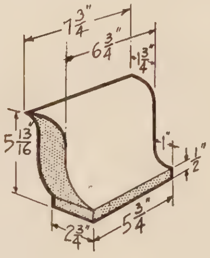
## ROUND TOP COVE BASE

Group V



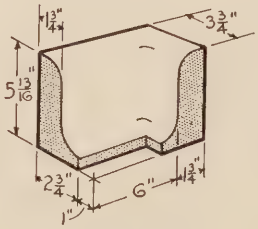
**4D5202R***

V



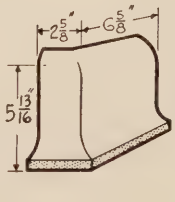
**4D527R***

V



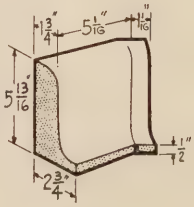
**3D528L***

V



**4D526R***

V



**3D529L***

Number with suffix R denotes right hand shape. Similar left hand shape takes suffix L. *Round top cove base not made unglazed

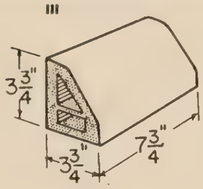
This series not furnished by all producers.

# NOMINAL 5⅓" x 8" FACE "4D" SERIES

## SUPPLEMENTAL SILL OR LINTEL STRETCHERS

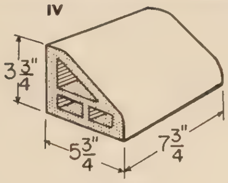
## SLOPE SILLS

**GROUP** III



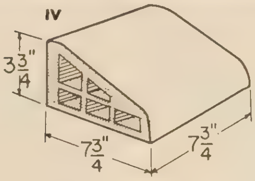
**4P70**

IV



**4P760**

IV

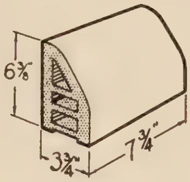


**4P780**

When used with bullnose jambs, use shape 4D304 as a starter

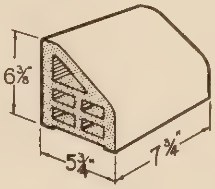
Note: Slope sills also available 5 1/16 inches high — See page 7

**GROUP** IV



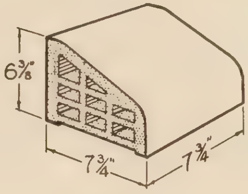
**4N70**

V



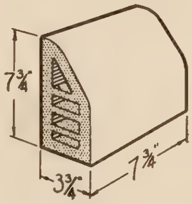
**4N760**

V



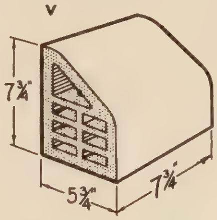
**4N780**

**GROUP** IV



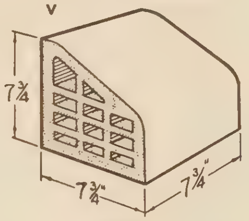
**4W70**

V



**4W760**

V

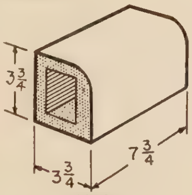


**4W780**

## BULLNOSE SILL, CAP OR LINTEL

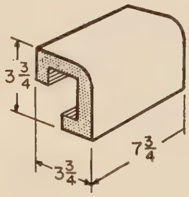
**4" BED OR REVEAL**

**GROUP II**



**4P20**
**Same—Square Edge**
**4P10**

II

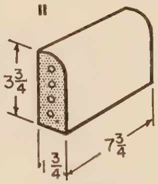


**4P20B**

**2" BED OR REVEAL**

Solid or open back

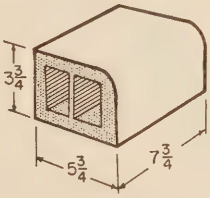
II



**4P20A**
**Same—Square Edge**
**4P10A**

**6" BED OR REVEAL**

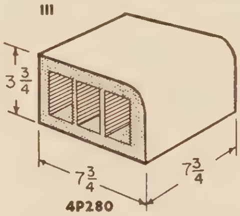
III



**4P260**
**Same—Square Edge**
**4P160**

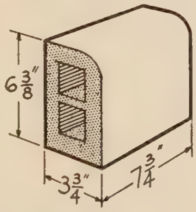
**8" BED OR REVEAL**

III



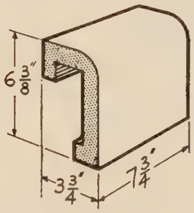
**4P280**
**Same—Square Edge**
**4P180**

**GROUP III**



**4N20**

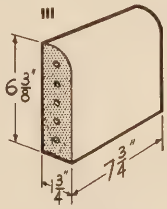
III



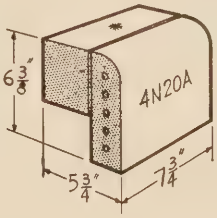
**4N20B**

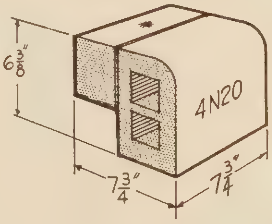
Solid or open back

III

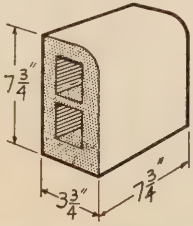


**4N20A**



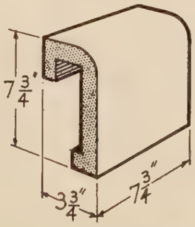


**GROUP III**



**4W20**

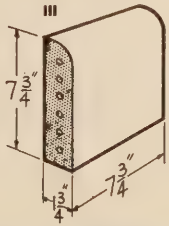
III



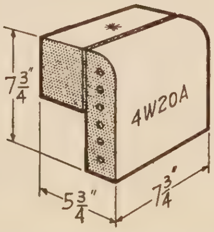
**4W20B**

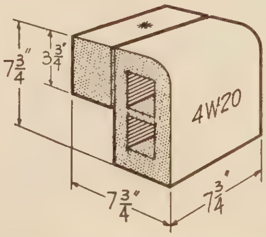
Solid or open back

III



**4W20A**





*** Cut on the job.**

# NOMINAL 5⅓" x 12" FACE "6T" SERIES

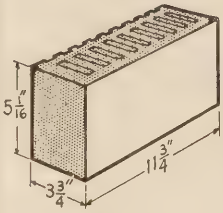
This series furnished by all producers.

## STRETCHER

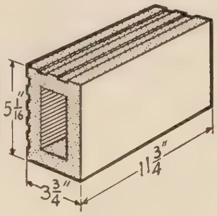
4" BED OR REVEAL — 2" BED OR REVEAL — 6" BED OR REVEAL — 8" BED OR REVEAL

### FIELD

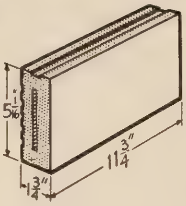
Group — Stretcher — Scored or unscored — Soap — 6" Stretcher — Scored or unscored — 8" Stretcher



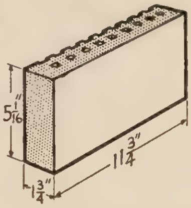
**6T**
6Tsm
6Tsu
6Tgr (shown)
Also Available
6S—2⅜" high



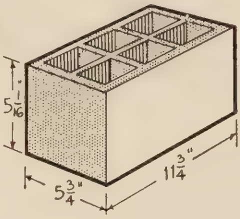
**6TC**
6TCsm
6TCsu
6TCgr (shown)



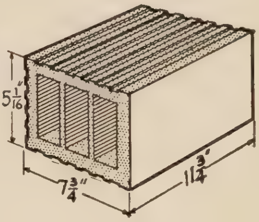
**6TCA**



**6TA**
Also Available
6SA—2⅜" high



**6T60** (unglazed only)
6T60sm * (shown) ← * Not made Ceramic or Clear Glaze →
6T60su
6T60gr
Also Available
6TC60 horizontal cell



**6TC80**
6TC80sm *
6TC80su
6TC80gr (shown)
Also Available
6T80 vertical cell
(unglazed only)

Shipments may be facilitated by simply ordering stretchers (EXAMPLE 6T or 6TC), thereby permitting the manufacturer to ship either the scored or smooth back stretchers, or a mixture. If job conditions require that the back be of a certain type, they may be obtained by ordering the following: sm—unselected glazed back; in unglazed, smooth back, selected one face; su—unselected, unscored, unglazed back; gr—scored or grooved back. Type and direction of SCORING and CORING are optional with the manufacturer. In general, the manufacturer standardizes on either the horizontal or vertical coring and does not supply both.

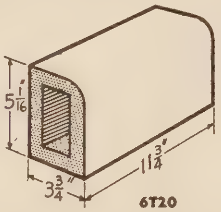
### SQUARE

Group II **6T10** — II **6T10A** Solid or open back — III **6T160** — III **6T180**

SAME AS BELOW BUT SQUARE INSTEAD OF BULLNOSE

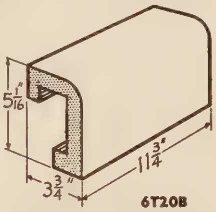
### BULLNOSE
### SILL, CAP OR LINTEL

Group II



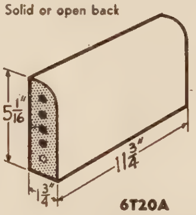
**6T20**

II



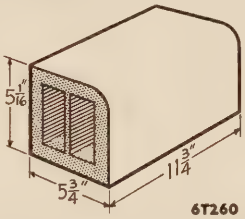
**6T20B**

II Solid or open back



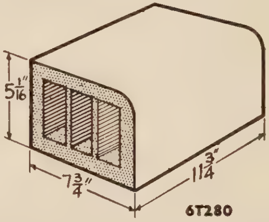
**6T20A**

III



**6T260**

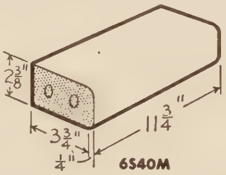
III



**6T280**

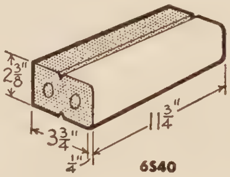
### BOX CAP-MOLD

Group III



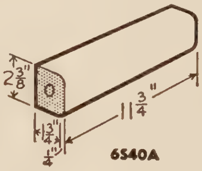
**6S40M**

II

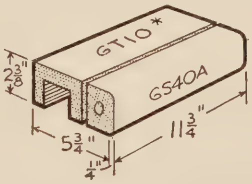


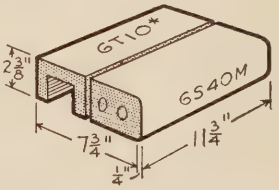
**6S40**

II



**6S40A**

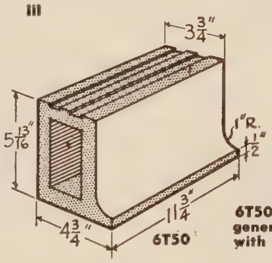




* Cut on the job.

### COVE BASE

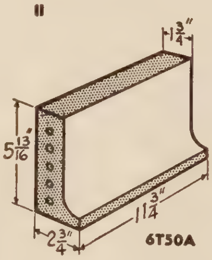
Group III



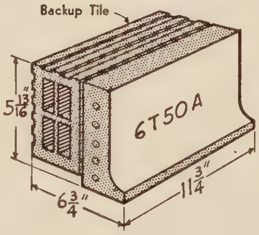
**6T50**

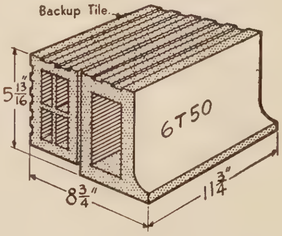
6T50A units are generally used with stretchers

II



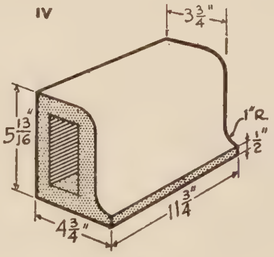
**6T50A**





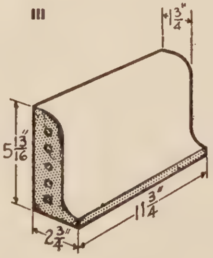
### ROUND TOP COVE BASE

Group ▲ IV

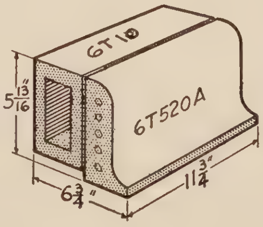


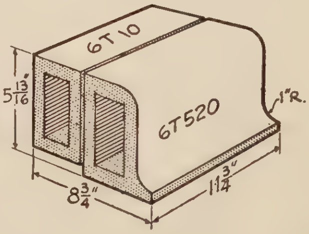
**6T520■**

III



**6T520A■**





■ Round top cove base not made unglazed

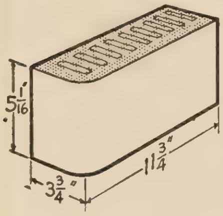
This series furnished by all producers

# NOMINAL 5⅓" x 12" FACE "6T" SERIES

## BULLNOSE JAMB OR STARTER

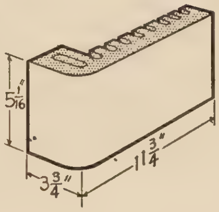
### 4" RETURN OR SOAP (4" RETURN) — SOAP (2" RETURN)

GROUP I



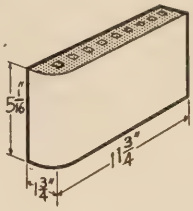
**6T4**
3T4—5¾" length

I



**6T4B**

I



**6T4A**

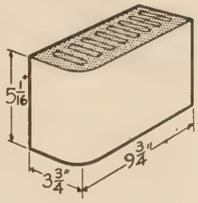
An extra charge is made for cutting lengths or heights other than those shown or listed.

A power driven saw should be used for cutting on the job.

## BULLNOSE CORNER

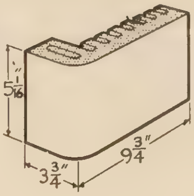
### 4" RETURN — SOAP (4" RETURN)

I



**5T4**
also available
5S4—2⅜" high

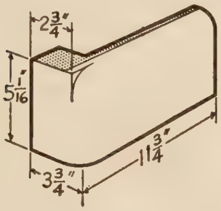
I



**5T4B**
also available
5S4B—2⅜" high

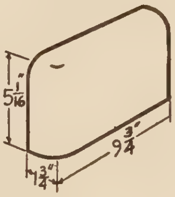
## STARTER

GROUP IV



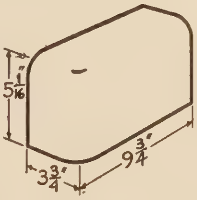
**6T24X2R**

IV



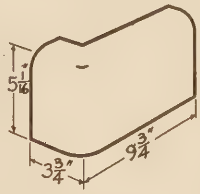
**5T24AR**

V



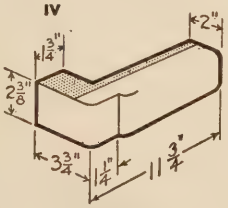
**5T24CR**

IV



**5T24R**

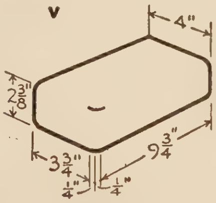
Group IV



**6S404R**

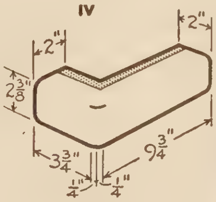
**Note: Nominal dimensions are usually given for returns, reveals, lengths, etc.,—2" is actually 1¾", 4" is actually 3¾", 6" is actually 5¾", 8" is actually 7¾", 10" is actually 9¾", 12" is actually 11¾" However, all dimensions shown on shape drawings are actual.**

V



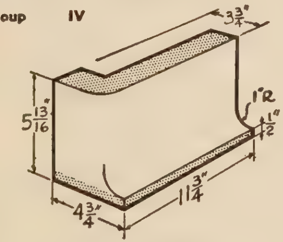
**5S44MR**

IV

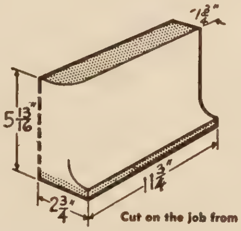


**5S44BR**

Group IV

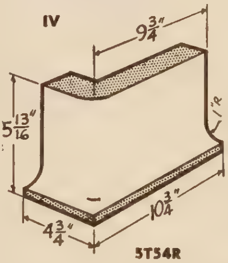


**6T504R**



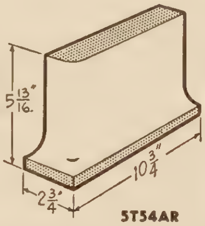
**Cut on the job from**
6T504R

IV



**5T54R**

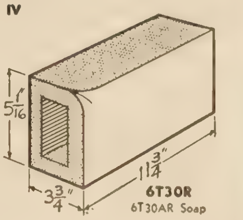
IV



**5T54AR**

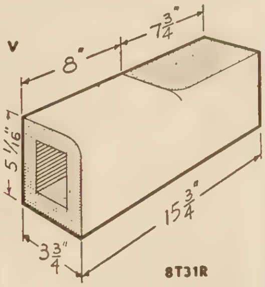
## MITER

IV



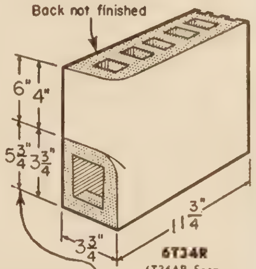
**6T30R**
6T30AR Soap

V



**8T31R**
8T31AR Soap
8T31BR Soap
4" Reveal

V

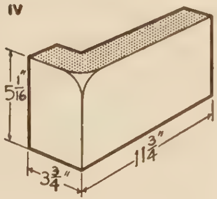


**6T34R**
6T34AR Soap
6T34BR Soap
4" Return

**Alternate — 6N34R**
6N34AR Soap
6N34BR Soap
4" Return

## STARTER

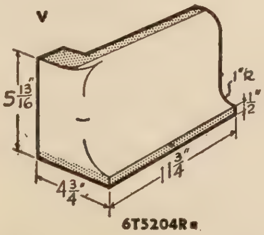
IV



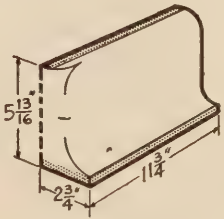
**6T304R**

Use with slope sills and bullnose jambs

Group V

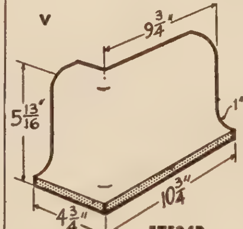


**6T5204R▪**



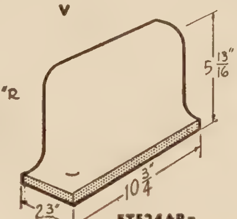
**Cut on the job from**
6T5204R▪

V



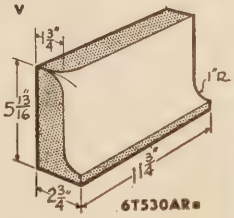
**5T524R▪**

V



**5T524AR▪**

V



**6T530AR▪**

Number with suffix R denotes right hand shape. Similar left hand shape takes suffix L. ▪Round top cove base not made unglazed

# NOMINAL 5⅓" x 12" FACE "6T" SERIES

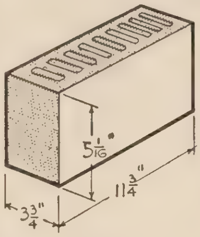
This series furnished by all producers

**4" WALL-GLAZED BOTH SIDES** — **STRETCHER** · **FULL END** · **HALF END**

**6" WALL-GLAZED BOTH SIDES** — **STRETCHER** · **FULL END**

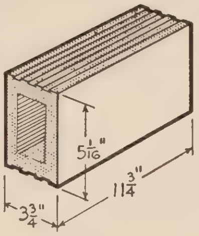
## FIELD

Group



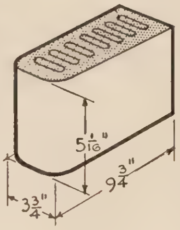
**6TD**
also available
6SD—2⅜" high

Two Faced
Stretcher



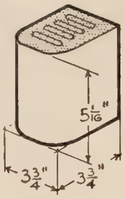
**6TCD**

III

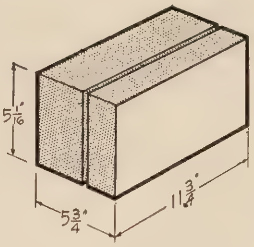


**5T5**

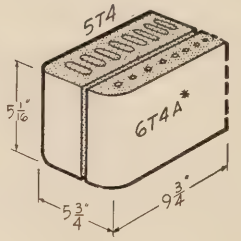
III



**2T5**



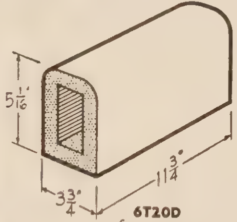
Note: Supplied as one unit in salt glazed and unglazed — as 6T60D or 6TC60D



*** Cut on the job.**

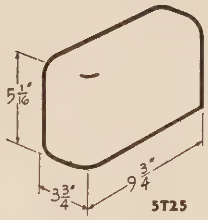
## BULLNOSE
SILL, CAP OR LINTEL

Group III



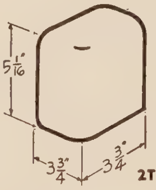
**6T20D**
Same square
edge 6T10D

VI



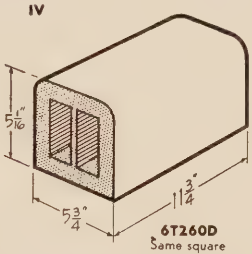
**5T25**

VI

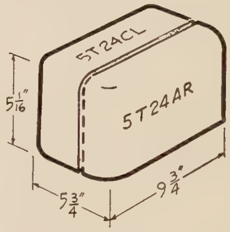


**2T25**

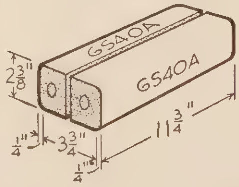
IV

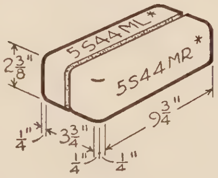


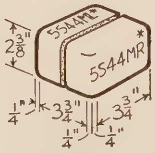
**6T260D**
Same square
edge 6T160D

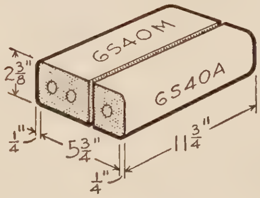


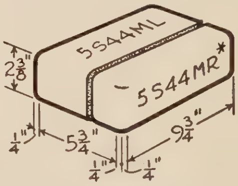
## BOX CAP-MOLD



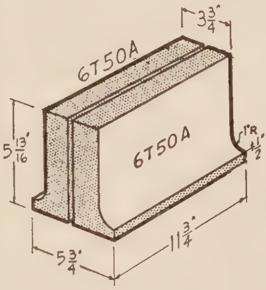


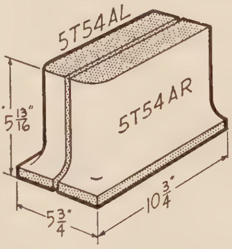


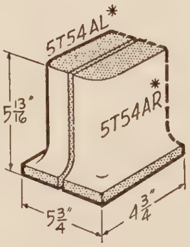


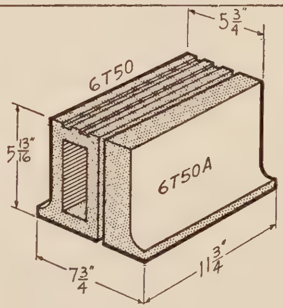


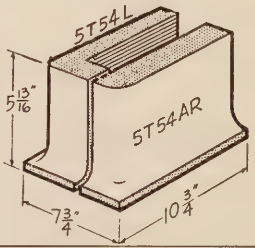
## COVE BASE



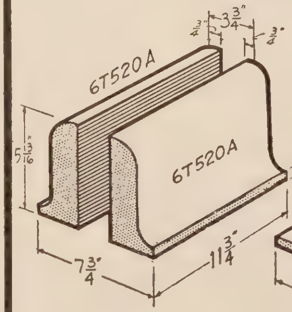


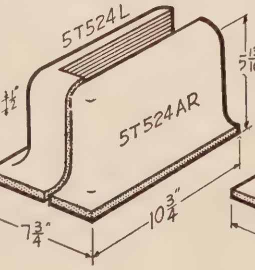


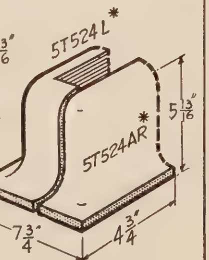


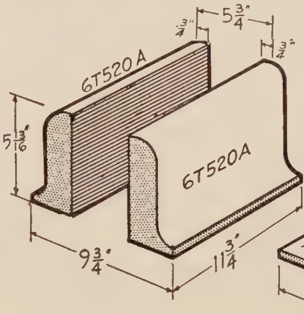


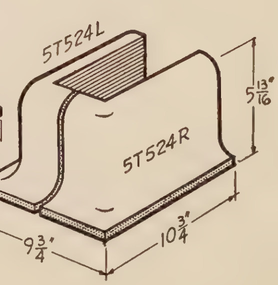
## ROUND TOP COVE BASE











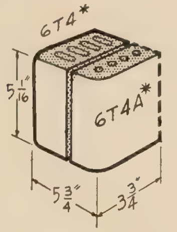
Round top cove base not made unglazed

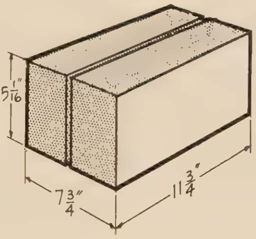
This series furnished by all producers.

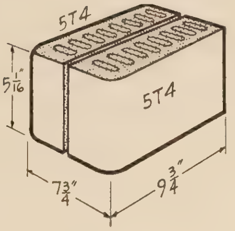
# NOMINAL 5⅓" x 12" FACE "6T" SERIES

| 6" WALL | 8" WALL—GLAZED BOTH SIDES | | | STANDARD RADIALS | |
|---|---|---|---|---|---|
| HALF END | STRETCHER | FULL END | HALF END | STRETCHER | STARTER |

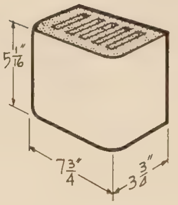
Group





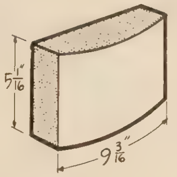


III



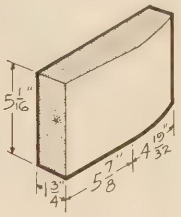
**2T85**

III



**5T90**
also available
5S90—2⅜" high

V

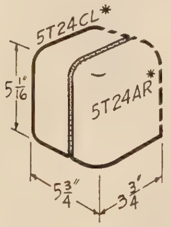


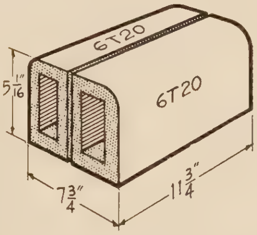
**6T91**
Also Available
6S91—2⅜" high

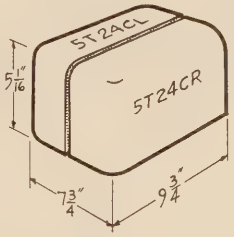
* Cut on the job.

Note: **INTERNAL** radial shapes are similar in numbering and dimensioning. In ordering by number simply prefix the letter, "I" to the corresponding external shape number. Internal radial shapes are manufactured for a radius of 48" as standard.

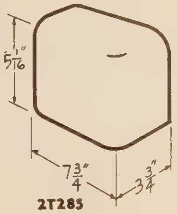
Group





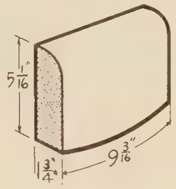


VI



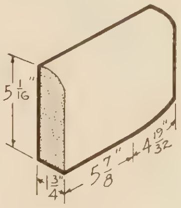
**2T285**

V



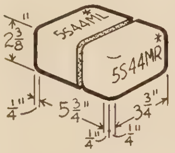
**5T920**

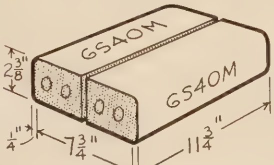
VII

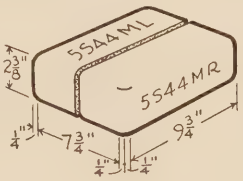


**6T921L**

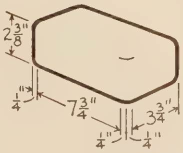
Group





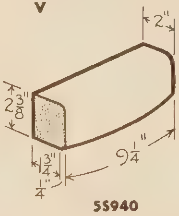


VI



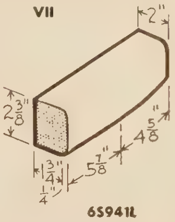
**2S485**

V



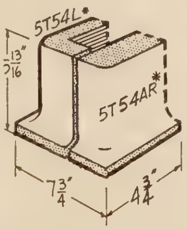
**5S940**

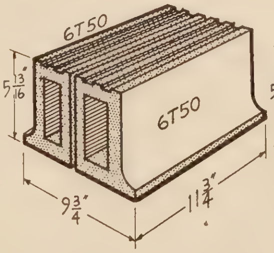
VII

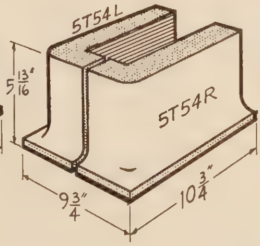


**6S941L**

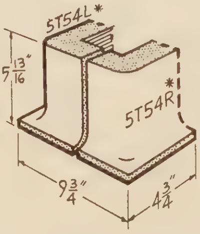
Group



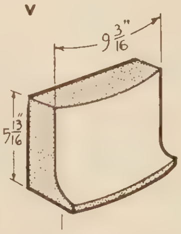




VI

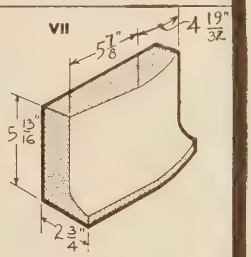


V



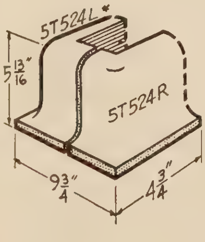
**5T950**

VII



**6T951L**

Group



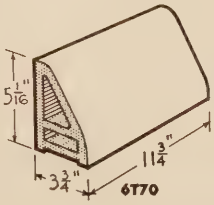
## SLOPE SILLS

III

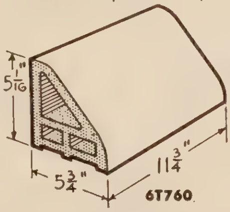
IV

IV

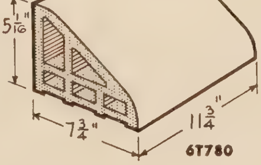
When used with bullnose jambs, use shape 6T304R as starter



**6T70**



**6T760**



**6T780**

Note: Slope sills also available in nominal 4" 6⅔" and 8" heights. See Page 23.

Number with suffix R denotes right hand shape. Similar left hand shape takes suffix L.

NOTE: Standard external radii for the above shapes are 12" and 24". Standard internal radius is 48". In ordering, prefix radius in inches to shape number (Example: 24-5T90 would be a field stretcher for a 24" external radius). Non-standard radii in increments of 6" will be furnished.

Special dies required must be provided by the purchaser and non-standard radii, group III shapes will be group VI, group V shapes will be group X, and group VII shapes will be group XIV.

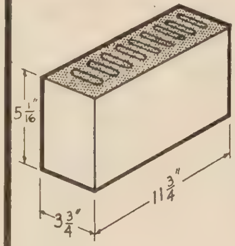
# NOMINAL 5⅓" x 12" FACE "6T" SERIES

This series furnished by all producers.

**QUOIN (Square) JAMB OR STARTER** — 4" RETURN OR SOAP (4" RETURN) | **SQUARE INTERNAL CORNER** | **COVED INTERNAL CORNER** | **OCTAGONAL EXTERNAL CORNER** | **OCTAGONAL INTERNAL CORNER**

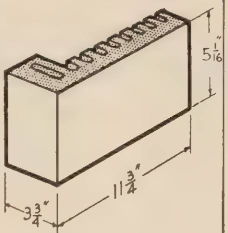
## FIELD

Group I



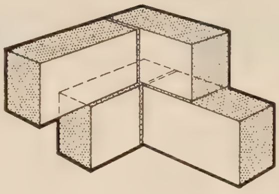
**6T2**
3T2—5¾" length

I



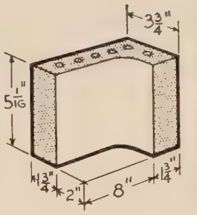
**6T2B**

4" OR 2" BED



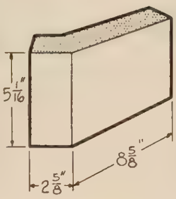
Use regular stretchers
or soaps for the field

I



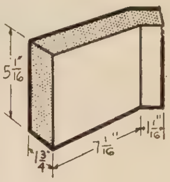
**4T8**
Also Available
4S8—2⅜" high

I



**5T6**
also available
5S6—2⅜" high

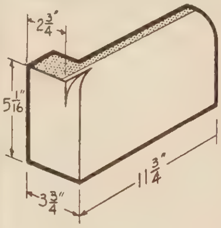
I



**4T9**
also available
4S9—2⅜" high

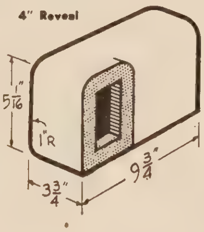
## BULLNOSE SILL, CAP OR LINTEL

Group IV



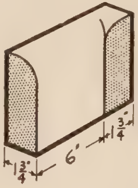
**6T22X2R**

V
4" Reveal



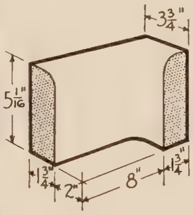
**5T24X27R**

IV
2" Reveal



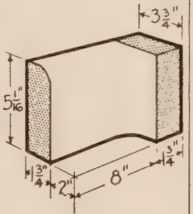
**3T27L**

IV



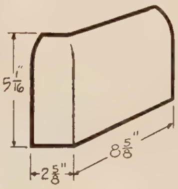
**4T28L**

IV



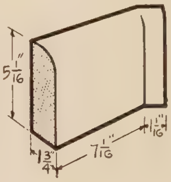
**4T208L**

IV



**5T26R**

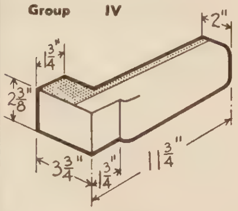
IV



**4T29L**

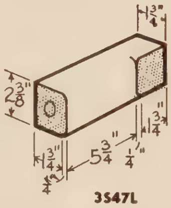
## BOX CAP-MOLD

Group IV



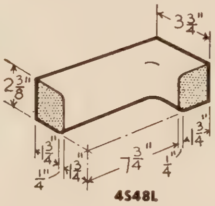
**6S402R**

IV



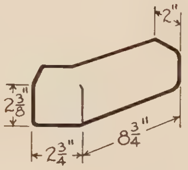
**3S47L**

IV



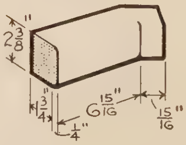
**4S48L**

IV



**5S46R**

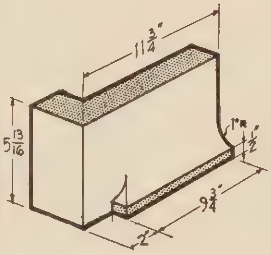
IV



**4S49L**

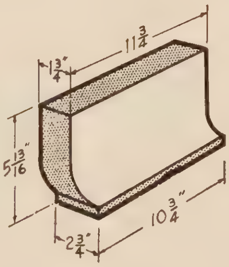
## COVE BASE

Group IV



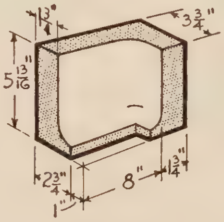
**6T502R**

IV



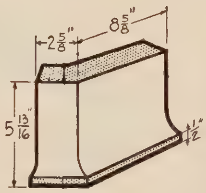
**6T57R**

IV



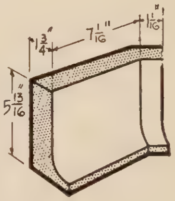
**4T58L**

IV



**5T56R**

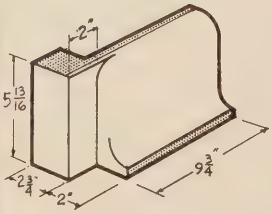
IV



**4T59L**

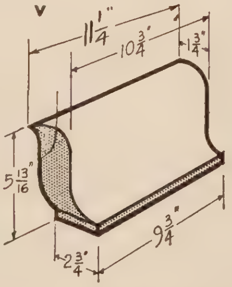
## ROUND TOP COVE BASE

Group V



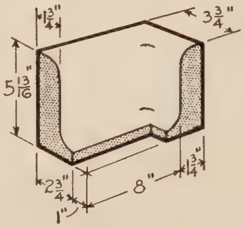
**6T3202R▪**

V



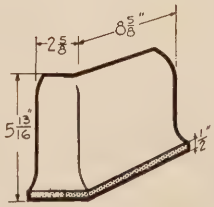
**6T527R▪**

V



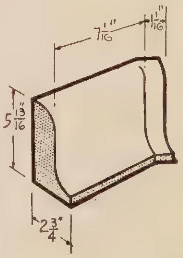
**4T528L▪**

V



**5T526R▪**

V



**4T529L▪**

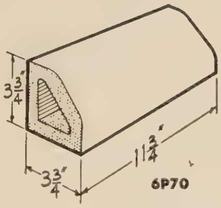
Number with suffix R denotes right hand shape. Similar left hand shape takes suffix L. ▪Round top cove base not made unglazed his series furnished by all producers.

# NOMINAL 5⅓" x 12" FACE "6T" SERIES

## SUPPLEMENTAL SILL OR LINTEL STRETCHERS

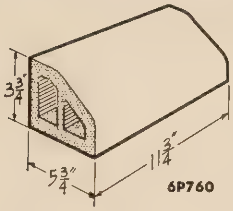
## SLOPE SILLS

GROUP III



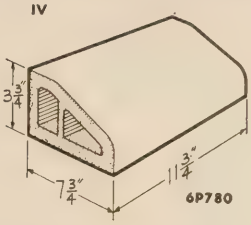
6P70

IV



6P760

IV

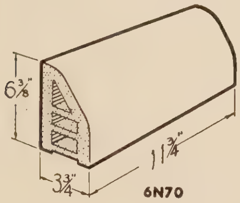


6P780

When used with bullnose jambs, use shape 6T304 as a starter

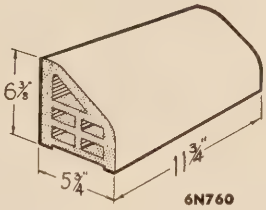
Note: Slope sills also available 5$\frac{1}{16}$ inches high — See page 13

GROUP IV



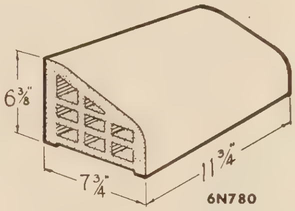
6N70

V



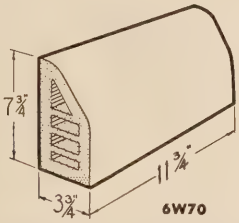
6N760

V



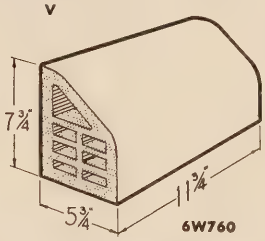
6N780

GROUP IV



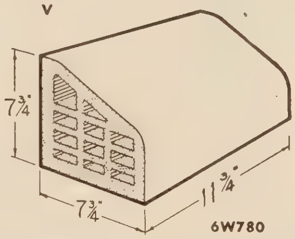
6W70

V



6W760

V

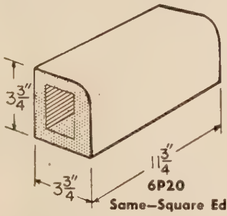


6W780

## BULLNOSE SILL, CAP OR LINTEL

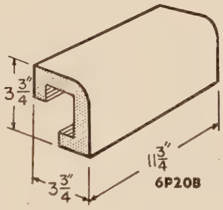
**4" BED OR REVEAL** — **2" BED OR REVEAL** — **6" BED OR REVEAL** — **8" BED OR REVEAL**

GROUP II



6P20
Same–Square Edge
6P10

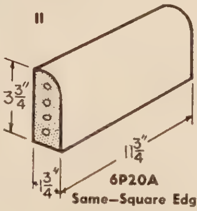
II



6P20B

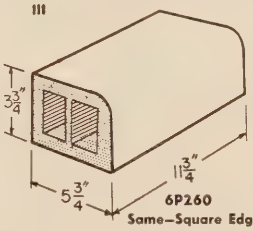
Solid or open back

II



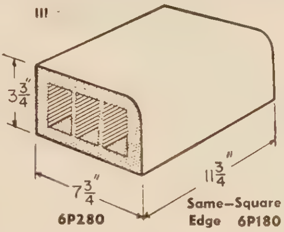
6P20A
Same–Square Edge
6P10A

III



6P260
Same–Square Edge
6P160

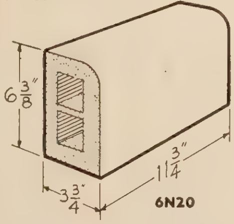
III



6P280

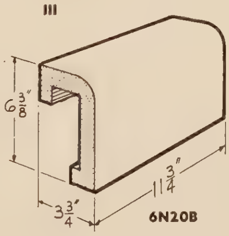
Same–Square
Edge 6P180

GROUP III



6N20

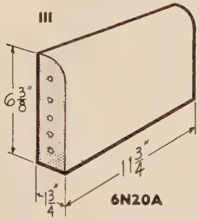
III



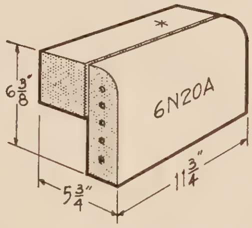
6N20B

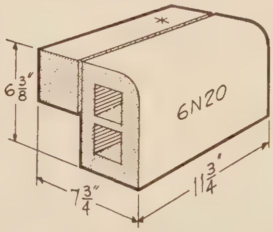
Solid or open back

III

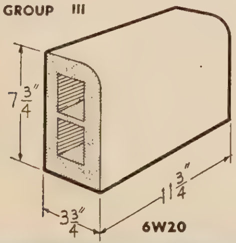


6N20A



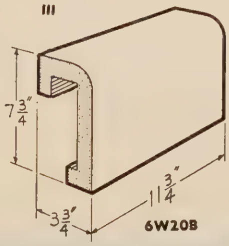


GROUP III



6W20

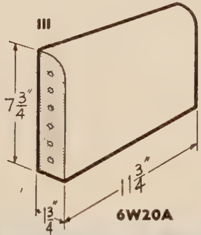
III



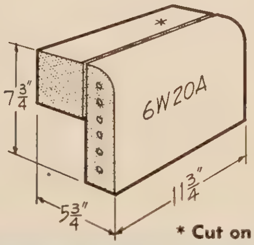
6W20B

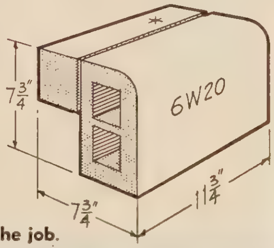
Solid or open back

III



6W20A

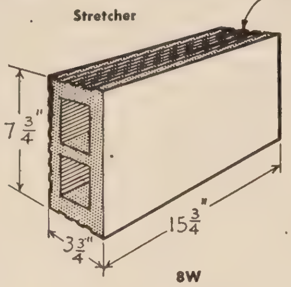
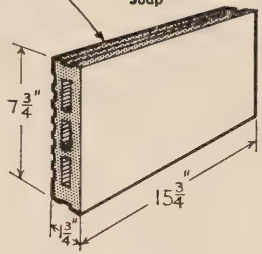
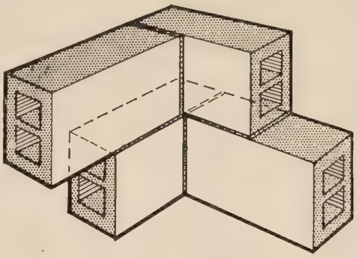
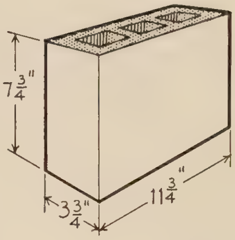
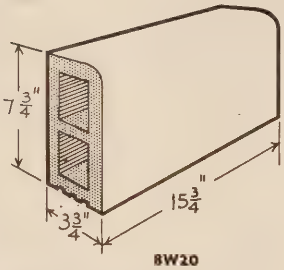
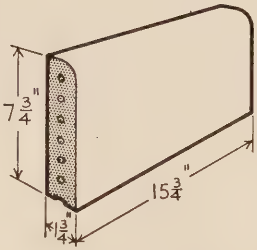
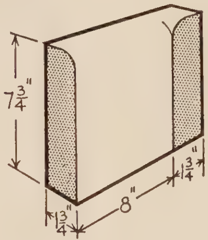
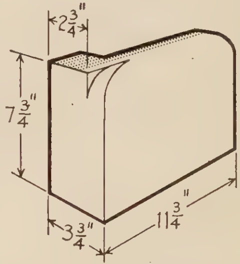
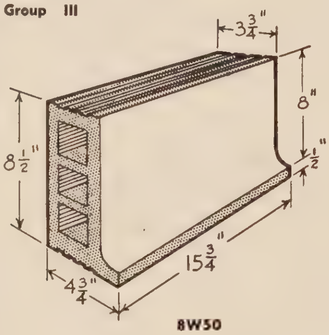
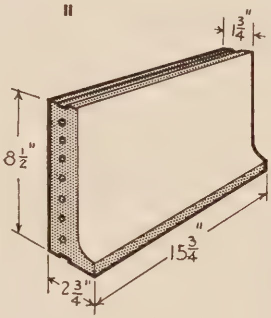
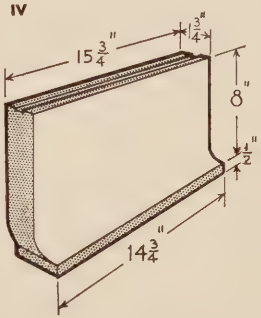
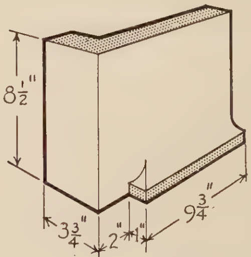
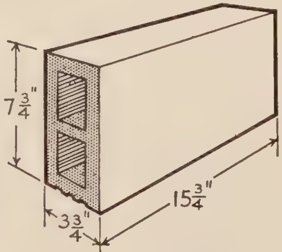
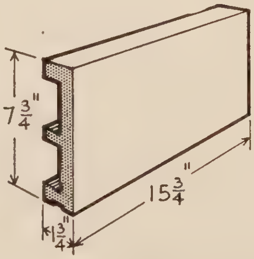
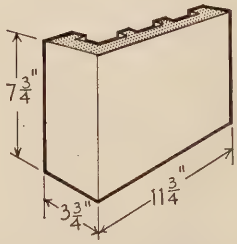




* Cut on the job.

# NOMINAL 8"x16" FACE "8W" SERIES

This series not furnished by all producers.

| | STRETCHER | | SQUARE INTERNAL CORNER | QUOIN (SQUARE) JAMB OR STARTER |
|---|---|---|---|---|
| | 4" BED OR REVEAL | 2" BED OR REVEAL | | 4" RETURN OR SOAP (4" RETURN |
| FIELD | Group<br>Stretcher<br>Scored back only<br><br> <br>**8W**<br>4W—7¾" length<br>Also Available<br>8P—3¾" height | Soap<br><br> <br>**8WA**<br>4WA—7¾" length<br>Also Available<br>8PA—3¾" height | <br>Use regular stretchers or soaps for the field. | I<br><br> <br>**6W2**<br>5W2—9¾" length<br>2W2—3¾" length |
| BULLNOSE<br>SILL, CAP OR LINTEL | Group II<br><br> <br>**8W20**<br>8W20B—same; soap, 3¾" reveal<br>4W20—7¾" length (Group I)<br>4W20B—7¾" length; soap, 3¾" reveal (Group I) | II<br><br> <br>**8W20A**<br>4W20A—7¾" length (Group I) | IV<br><br> <br>**4W27L** | IV<br><br> <br>**6W22X2R**<br>6W24X2R—same, bullnose corner |
| COVE BASE | Group III<br><br> <br>**8W50**<br>4W50—7¾" length<br>6W50—11¾" length | II<br><br> <br>**8W50A**<br>4W50A—7¾" length<br>6W50A—11¾" length | IV<br><br> <br>**8W57R** | IV<br><br> <br>**6W502R** |
| SQUARE<br>SILL, CAP OR LINTEL | Group II<br><br> <br>**8W10**<br>4W10—7¾" length | II<br><br> <br>**8W10A**<br>4W10A—7¾" length | **An extra charge is made for cutting lengths or heights other than those shown or listed.**<br>**A power driven saw should be used for all cutting on the job.**<br>**Note: Nominal dimensions are usually given for returns, reveals, lengths, etc.,—2" is actually 1¾", 4" is actually 3¾", 6" is actually 5¾", 8" is actually 7¾", 10" is actually 9¾", 12" is actually 11¾". However, all dimensions shown on shape drawings are actual.** | I<br><br> <br>**6W2B**<br>5W2B—9¾" length |

Number with suffix R denotes right hand shape. Similar left hand shape takes suffix L.

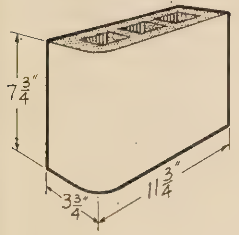
This series not furnished by all producers.

# NOMINAL 8"x16" FACE "8W" SERIES

## BULLNOSE JAMB AND CORNER

### 4" RETURN OR SOAP (4" RETURN)  SOAP (2" RETURN)

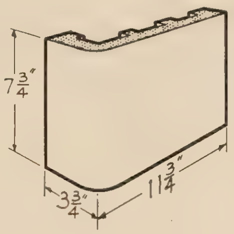
Group I



**6W4**

5W4—9¾" length
2W4—3¾" length

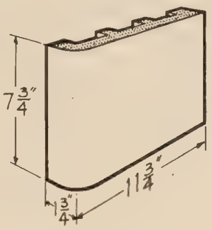
I



**6W4B**

5W4B—9¾" length
2W4B—3¾" length

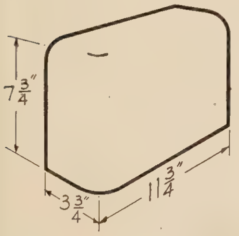
I



**6W4A**

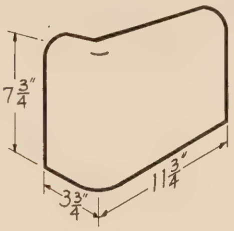
5W4A—9¾" length
2W4A—3¾" length

Group V



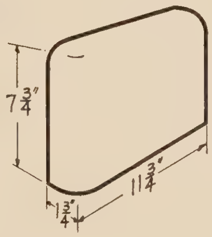
**6W24CR**

IV



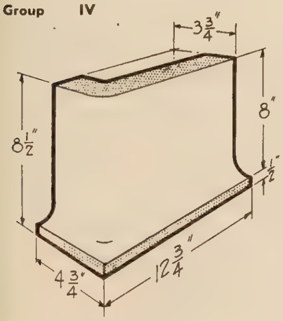
**6W24R**

IV



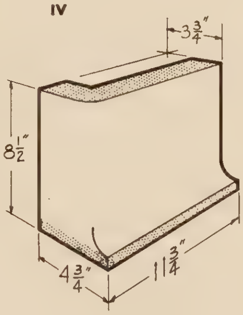
**6W24AR**

Group IV



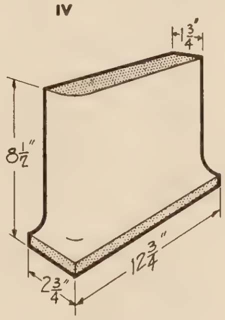
**6W54R**

IV



**6W504R**

IV

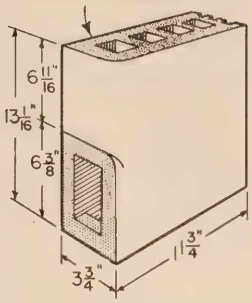


**6W54AR**

## MITER

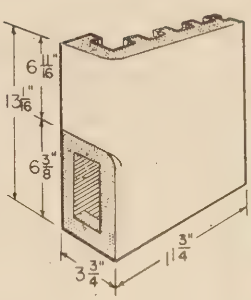
### 4" RETURN OR REVEAL  SOAP (4" OR 2" REVEAL)

V



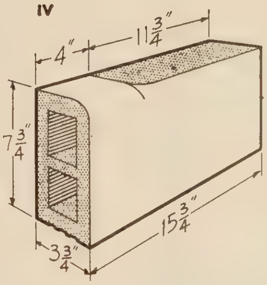
**6W34R**

V



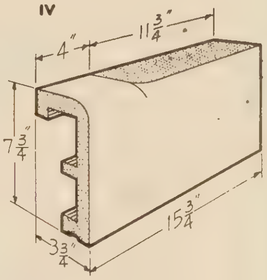
**6W34BR**

IV



**8W31MR**

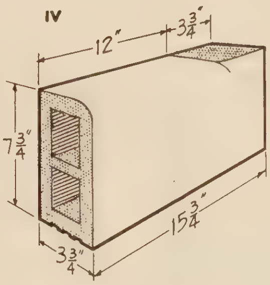
IV



**8W31MBR**

8W31MAR—same, 1¾" reveal

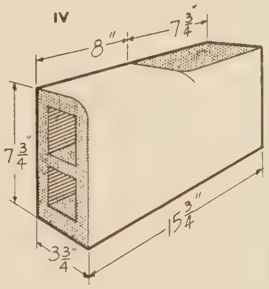
IV



**8W31QR**

Also Available
8W31QBR—same; soap, 3¾" reveal
8W31QAK—soap, 1¾" reveal

IV



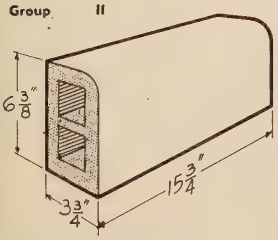
**8W31R**

Also Available
8W31BR—same; soap, 3¾" reveal
8W31AR—soap, -1¾" reveal

## SUPPLEMENTAL SILL OR LINTEL STRETCHERS

### 4" BED OR REVEAL  2" BED OR REVEAL

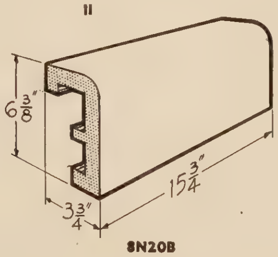
Group II



**8N20**

4N20—7¾" length
Also Available
8P20—3¾" height

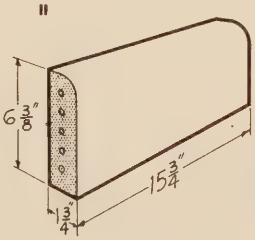
II



**8N20B**

4N20B—7¾" length
Also Available
8P20B—3¾" height

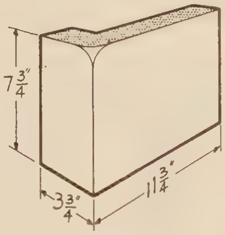
II



**8N20A**

4N20A—7¾" length
Also Available
8P20A—3¾" height

IV



**6W304R**

**Use with slope sills and bullnose jambs.**

Number with suffix R denotes right hand shape. Similar left hand shape takes suffix L..

# NOMINAL 8"x16" FACE "8W" SERIES

This series not furnished by all producers.

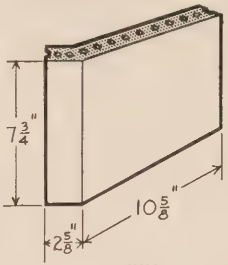
**OCTAGONAL**: EXTERNAL CORNER, INTERNAL CORNER

**COVED**: INTERNAL CORNER

**STANDARD RADIALS**: STRETCHER, STARTER

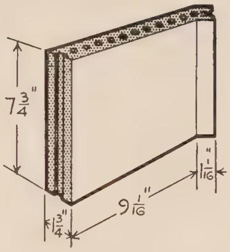
## FIELD

Group I



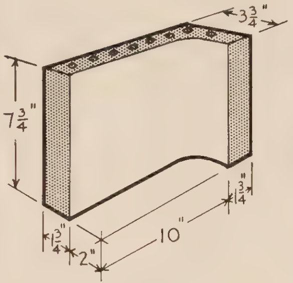
**6W6**

I



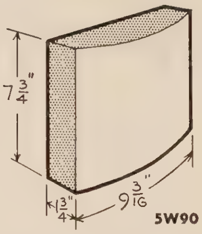
**5W9**

I



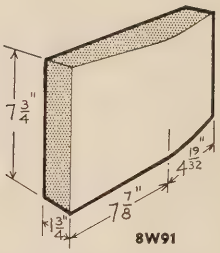
**5W8**

III



**5W90**

V

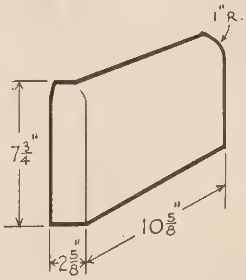


**8W91**

**Note: INTERNAL radial shapes are similar in numbering and dimensioning. In ordering by number simply prefix the letter, "I", to corresponding external shape number. Internal radial shapes are manufactured for a radius of 48 inches, as standard.**

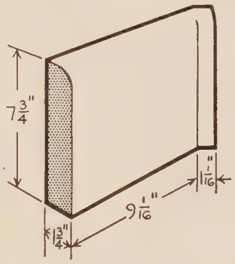
## BULLNOSE CAP

Group IV



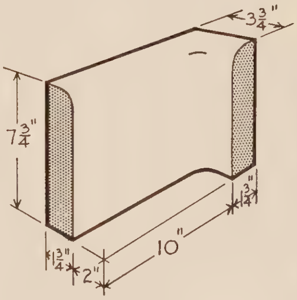
**6W26R**

IV



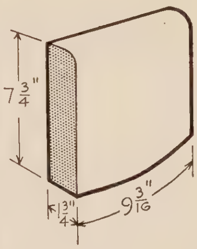
**5W29L**

IV



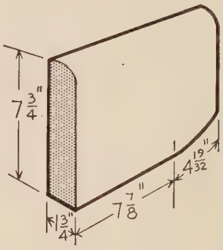
**5W28L**

V



**5W920**

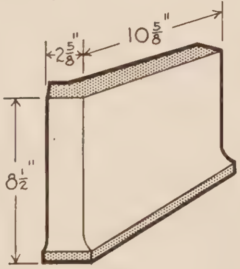
VII



**8W921L**

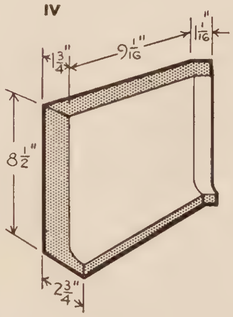
## COVE BASE

Group IV



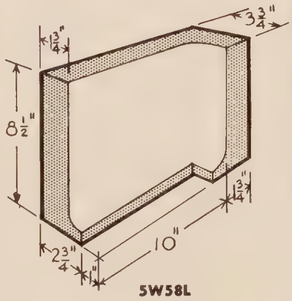
**6W56R**

IV



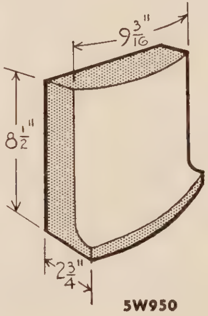
**5W59L**

IV



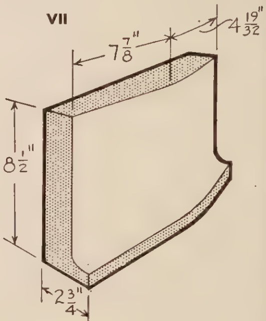
**5W58L**

V



**5W950**

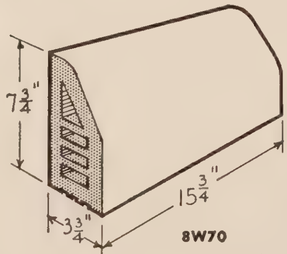
VII



**8W951L**

## SLOPE SILLS

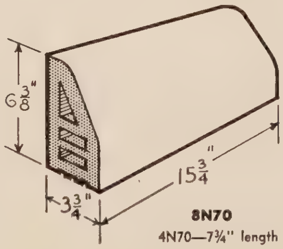
Group III



**8W70**

4W70—7¾" length

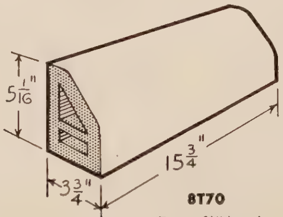
III



**8N70**

4N70—7¾" length

III



**8T70**

4T70—7¾" length
Also Available
8P70—3¾" height

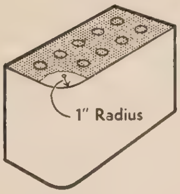
NOTE: Standard external radii for the above shapes are 12" and 24". Standard internal radius is 48". In ordering, prefix radius in inches to shape number (Example: 24-5W90 would be a field stretcher for a 24" external radius). Non-standard radii in increments of 6" will be furnished.

Special dies required must be provided by the purchaser and non-standard radii, group III shapes will be group VI, group V shapes will become group X, and group VII shapes will be group XIV.

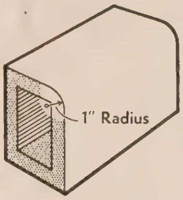
Number with suffix R denotes right hand shape. Similar left hand shape takes suffix L.

# specifications

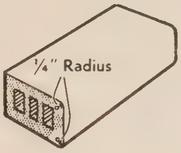
## STANDARD RADII FOR ALL SERIES



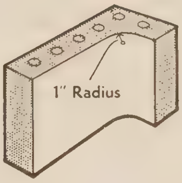
BULLNOSE
CORNER



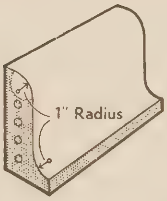
BULLNOSE
SILL, CAP OR LINTEL



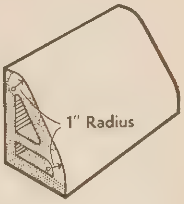
BOX
CAP-MOLD



INTERNAL
COVE



COVE BASE



SLOPE SILL

## FINISHES AND COLORS OF GLAZED AND UNGLAZED FACING TILE

### CERAMIC COLOR GLAZE

**Satin Finish**

**SINGLE COLOR FIELD SHADES**

White
Light Gray
Ivory
Sunlight Yellow
Coral
Tan
Light Green
Ocular Green
Blue

★

**MULTI-COLOR FIELD SHADES**

White Mottle
Gray Mottle
Cream Mottle
Green Mottle

★

**SINGLE COLOR TRIM SHADES**

Black

### CLEAR GLAZE

**Gloss Finish**

★

### SALT GLAZE

**Gloss Finish**

**COLORS**

Cream Tone
Buff Tone

★

### UNGLAZED

**Smooth Finish**

**COLORS**

Light Gray
Cream
Light Buff
Golden Buff
Gray Manganese Spot
Cream Manganese Spot

# PURPOSE *of the* FACING TILE INSTITUTE

*The Facing Tile Institute was formed and is maintained by responsible and progressive manufacturers of structural glazed and unglazed facing tile. Its aim is constant improvement in the material produced, and to make always available to the architectural profession and the building industry, a product representing the last word in quality and beauty.*

*It presents the highest standards of quality, and strives to coordinate the physical dimensions of all units. Thus the architect is definitely assured of quality and ease in use, since he is able to design and specify from a single set of specifications with full knowledge that regardless of material used, when furnished by a member of the Facing Tile Institute, the shapes and sizes furnished will be satisfactory, and the quality will meet the high standards of the Institute.*

## INSTITUTE MEMBERS

**BELDEN BRICK CO.**
Canton, Ohio

**CHARLESTON CLAY PRODUCTS CO.**
Charleston 22, West Virginia

**THE CLAYCRAFT CO.**
Columbus 16, Ohio

**HANLEY CO.**
New York 17, New York

**HOCKING VALLEY BRICK CO.**
Columbus 15, Ohio

**HYDRAULIC PRESS BRICK CO.**
Indianapolis 4, Indiana

**MAPLETON CLAY PRODUCTS CO.**
Canton 1, Ohio

**McNEES-KITTANNING CO.**
Kittanning, Pennsylvania

**METROPOLITAN BRICK, INC.**
Canton 2, Ohio

**NATIONAL FIREPROOFING CORP.**
Pittsburgh 22, Pennsylvania

**ROBINSON BRICK & TILE CO.**
Denver, Colo.

**STARK CERAMICS, INC.**
Canton 1, Ohio

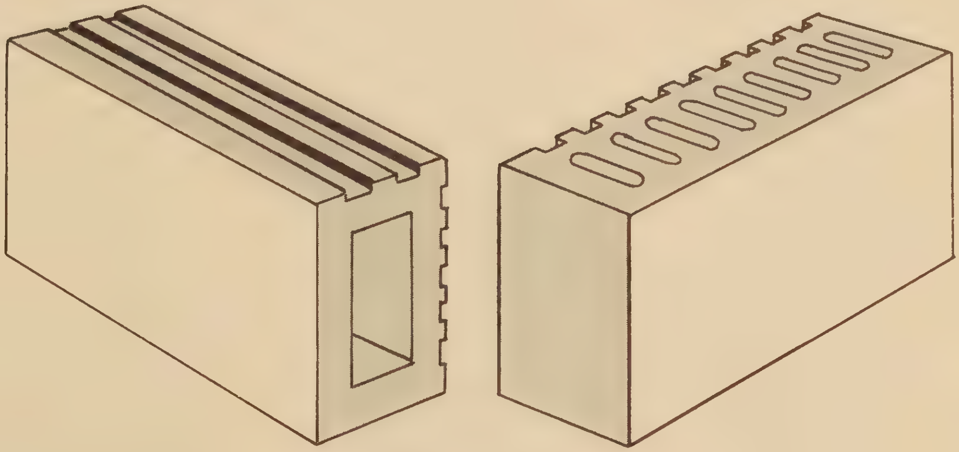
**WEST VIRGINIA BRICK CO.**
Charleston 24, West Virginia

## **6 T SERIES** nominal 5 1/3" x 12" face

# Facing tile

# CONSTRUCTION DETAILS

conforming to ASA modular standards

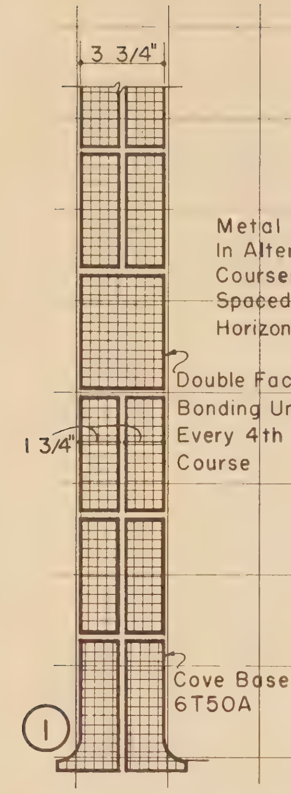


**FACING TILE INSTITUTE**

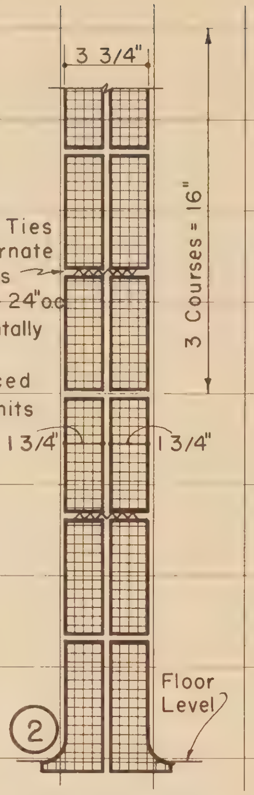
*affiliated with STRUCTURAL CLAY PRODUCTS INSTITUTE*

WASHINGTON 6, D. C.

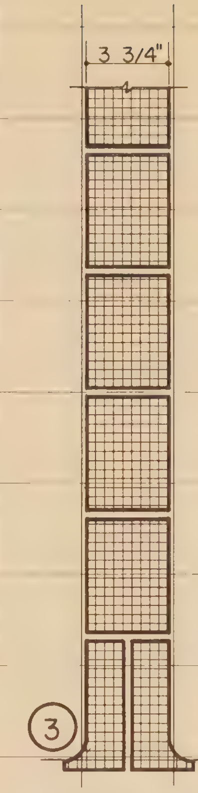
51-CD



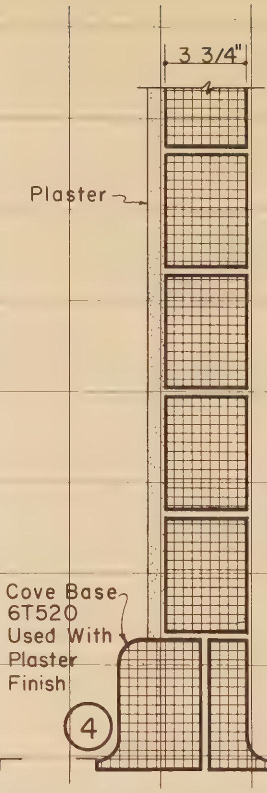
FOUR INCH PARTITION
Faced Both Sides
Masonry Bond


3 3/4"
Metal Ties In Alternate Courses Spaced 24" o.c. Horizontally
3 Courses = 16"
1 3/4"
1 3/4"
Floor Level
2

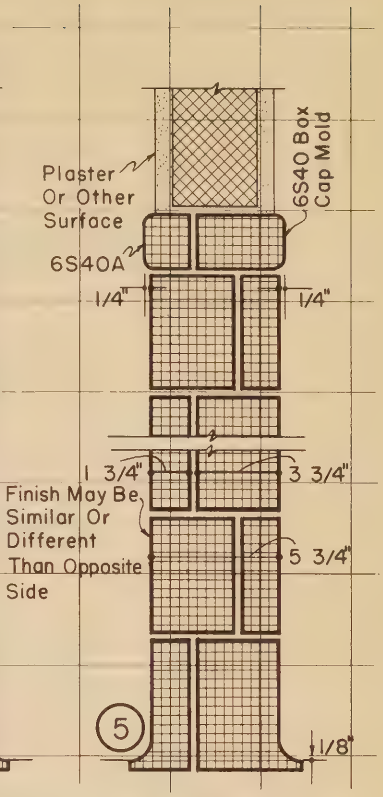
FOUR INCH PARTITION
Faced Both Sides
Metal Tie Bond



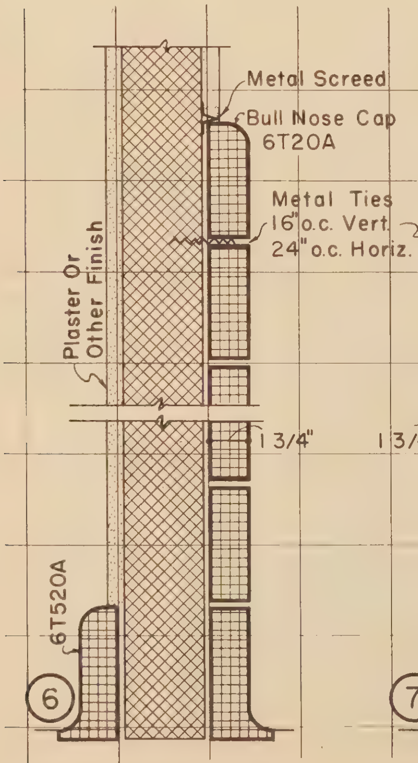
FOUR INCH SINGLE UNIT PARTITION
Faced Both Sides
(Available in 6″ & 8″ Thicknesses Unglazed & Salt Glazed Only)



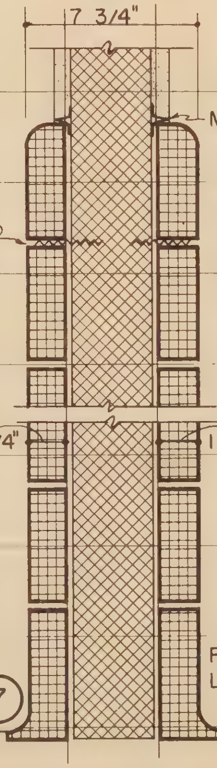
FOUR INCH PARTITION
Faced One Side
Use Scored Back Units if Opposite Side is Plastered as Shown



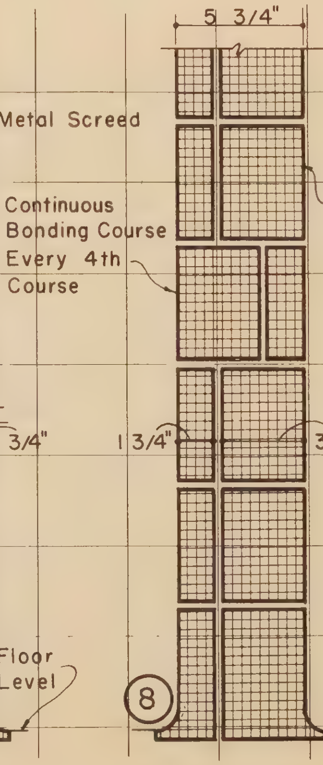
FOUR INCH PARTITION
Six Inch Wainscot Faced Both Sides with Box Cap Mold at Top



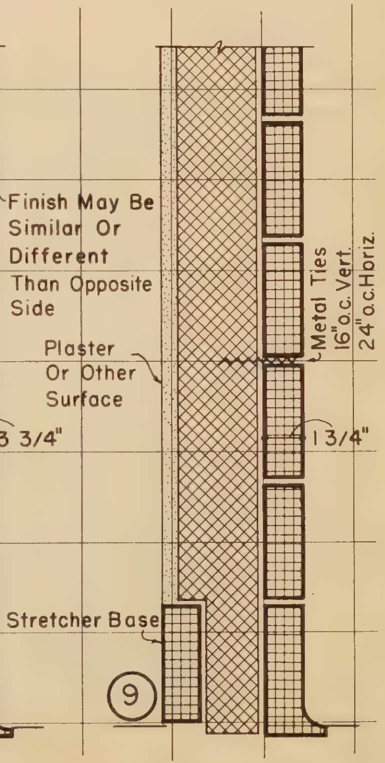
FOUR INCH PARTITION
Soap Wainscot One Side
Metal Tie Bond



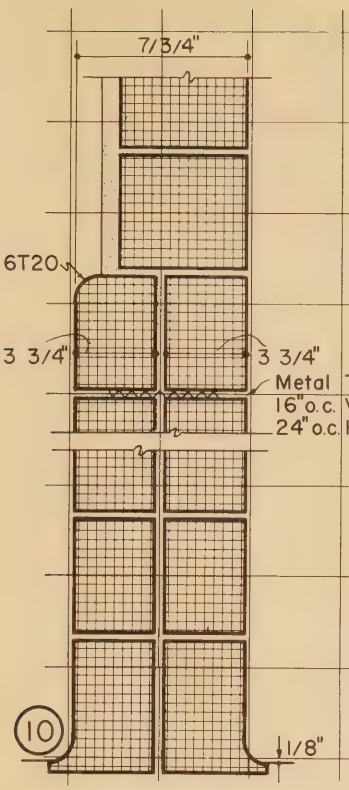
FOUR INCH PARTITION
Soap Wainscot Both Sides
Metal Tie Bond


5 3/4"
Continuous Bonding Course Every 4th Course
Finish May Be Similar Or Different Than Opposite Side
1 3/4"
3 3/4"
8

SIX INCH PARTITION
Faced Both Sides
Masonry Bond
(Metal Tie Bond Optional)

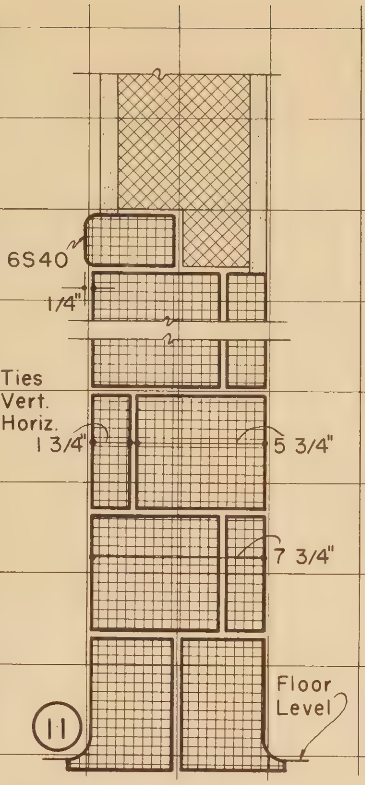


SIX INCH PARTITION
Soaps Full Height One Side
Plaster Opposite
Metal Tie Bond



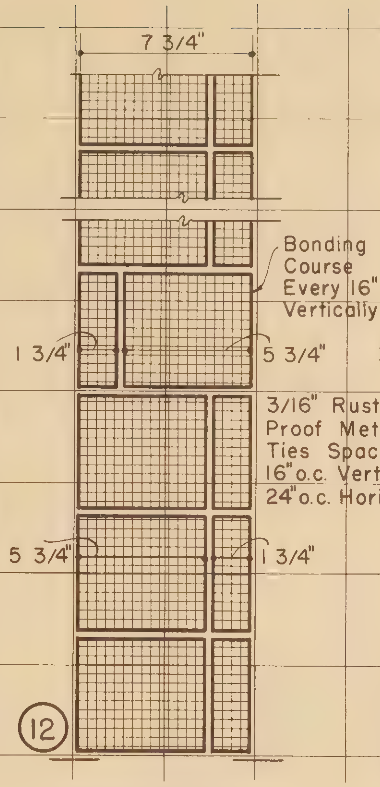
10

SIX INCH WALL
ABOVE EIGHT INCH
Faced Both Sides
Metal Tie Bond



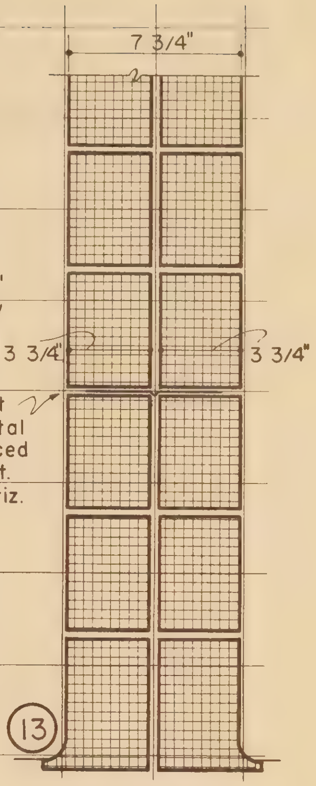
11

SIX INCH WALL
ABOVE EIGHT INCH
WAINSCOT
Faced Both Sides
Box Cap Mold at Top
One Side, Plain Stretcher
Cap Opposite



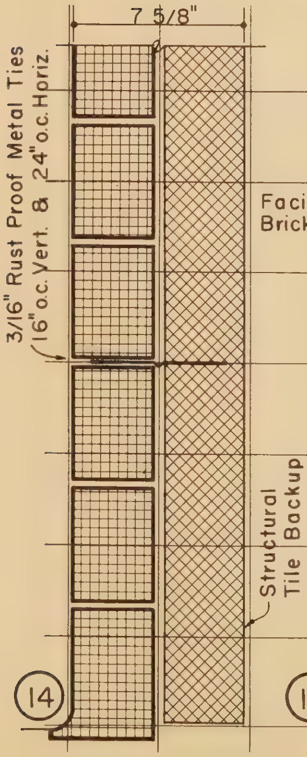
12

EIGHT INCH WALL
Faced Both Sides
Masonry Bond



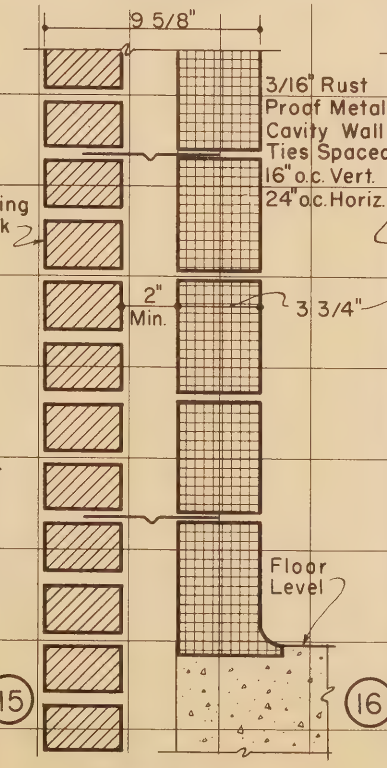
13

EIGHT INCH WALL
Faced Both Sides
Metal Tie Bond



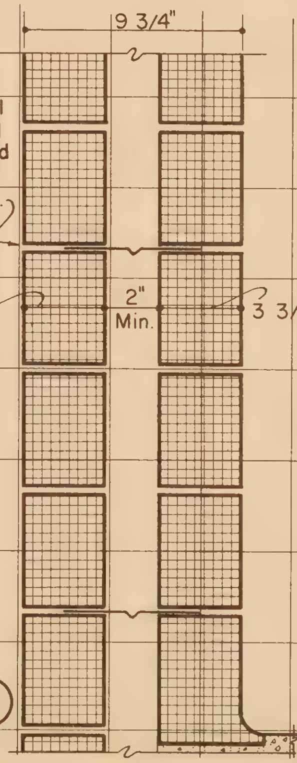
14

EIGHT INCH WALL
Faced One Side
Metal Tie Bond



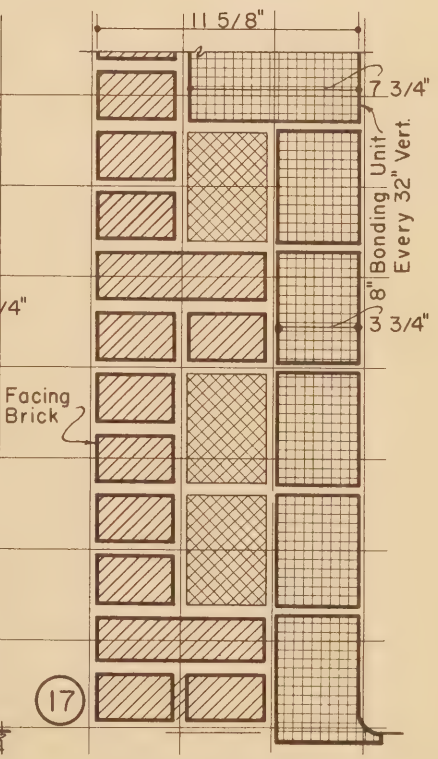
15

TEN INCH
CAVITY WALL
Tile Faced One Side



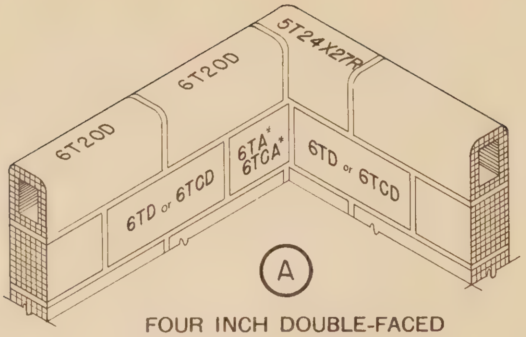
16

TEN INCH
CAVITY WALL
Tile Faced Both Sides



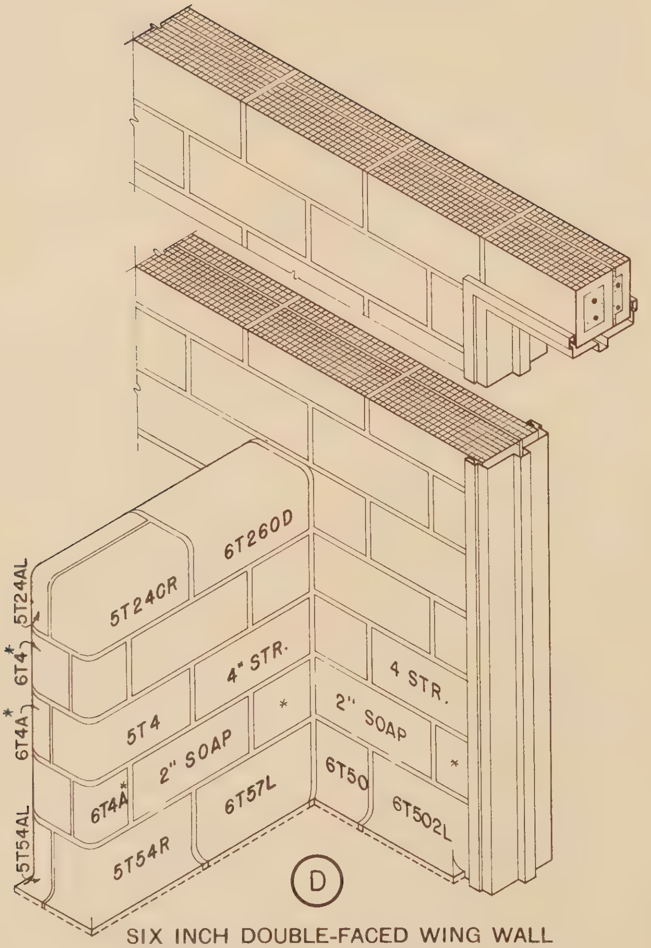
17

TWELVE INCH WALL
Tile Faced One Side
Masonry Bond



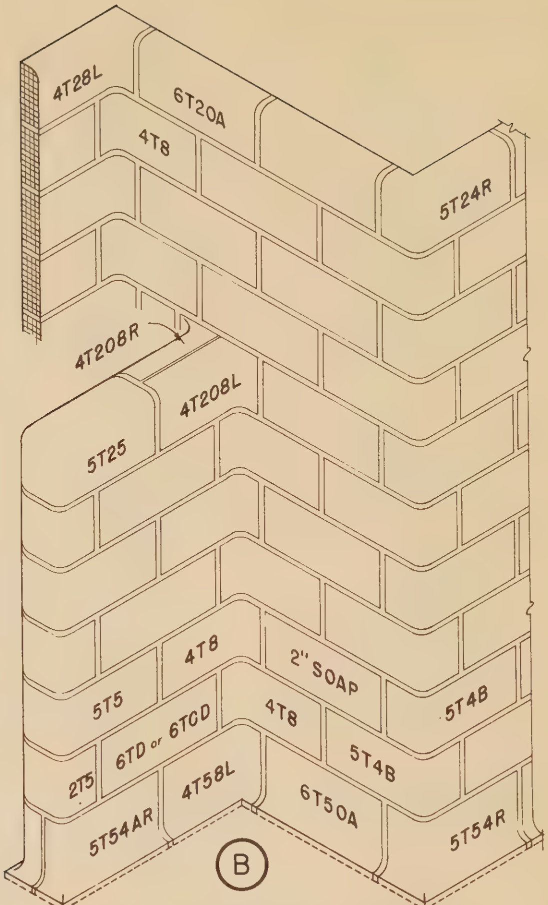
FOUR INCH DOUBLE-FACED
PARTITION CORNER WITH
BULLNOSE COPING

* Indicates that unit
is cut at the job

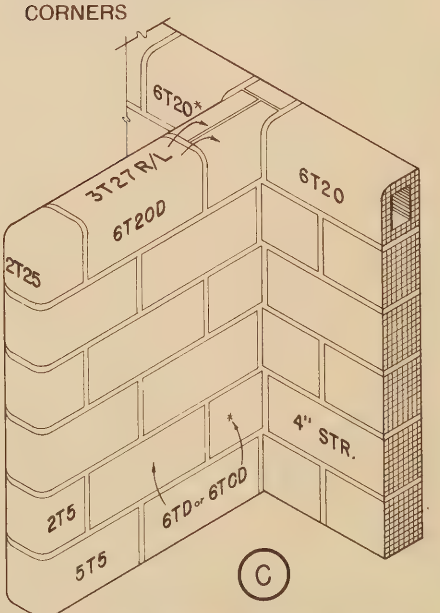


SIX INCH DOUBLE-FACED WING WALL
BONDED TO MAIN WALL WITH TYPICAL
BUTT JOINTS

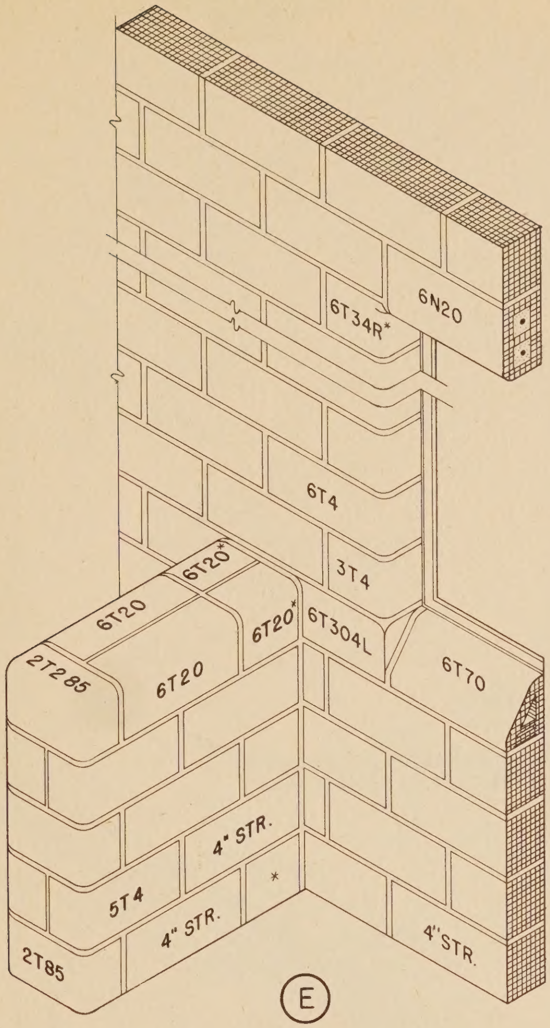
The butt jointing method is used when the wing wall or partition is built after the main wall has been constructed or when there is some doubt regarding permanent location of the partition.



FOUR INCH DOUBLE-FACED
WINGWALL BONDED TO MAIN
WALL WITH COVED INTERNAL
CORNERS



FOUR INCH DOUBLE-FACED
WING WALL BONDED TO MAIN
WALL WITH SQUARE INTERNAL
CORNERS



E

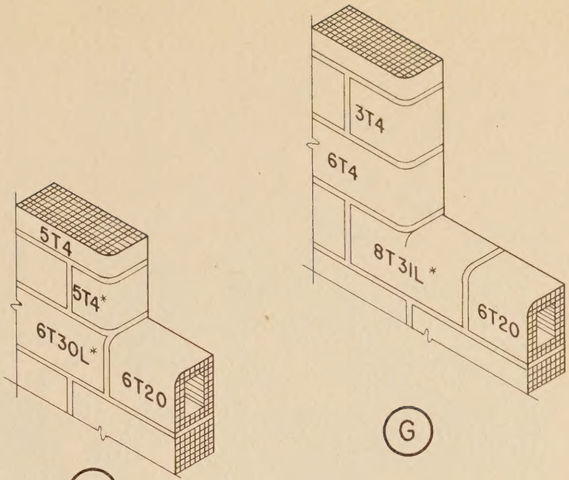
EIGHT INCH DOUBLE-FACED WING WALL BONDED TO MAIN WALL WITH TYPICAL BUTT JOINTS

Note use of slope sill and starter at juncture of bullnose jamb and slope sill. Exact window height is obtained by cutting universal miter unit 6T34 as shown.

* Indicates that unit is cut at the job

Note

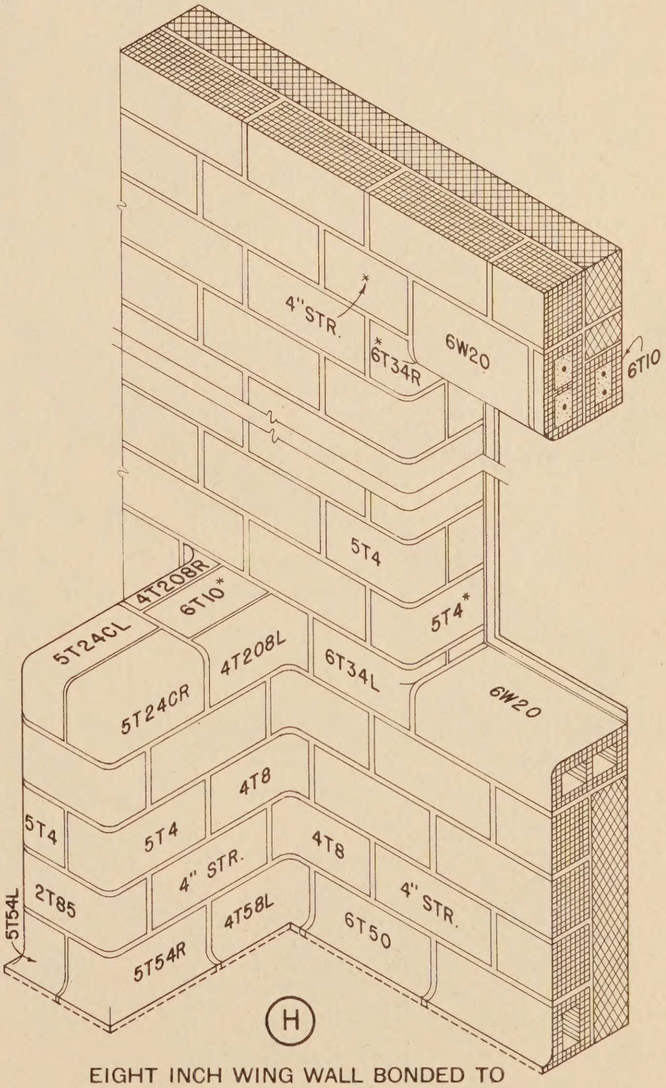
Modular "6T" series facing tile is designed to be laid with three courses in 16″, measured vertically, and with an average of 12″ horizontally center to center of vertical mortar joints.



F

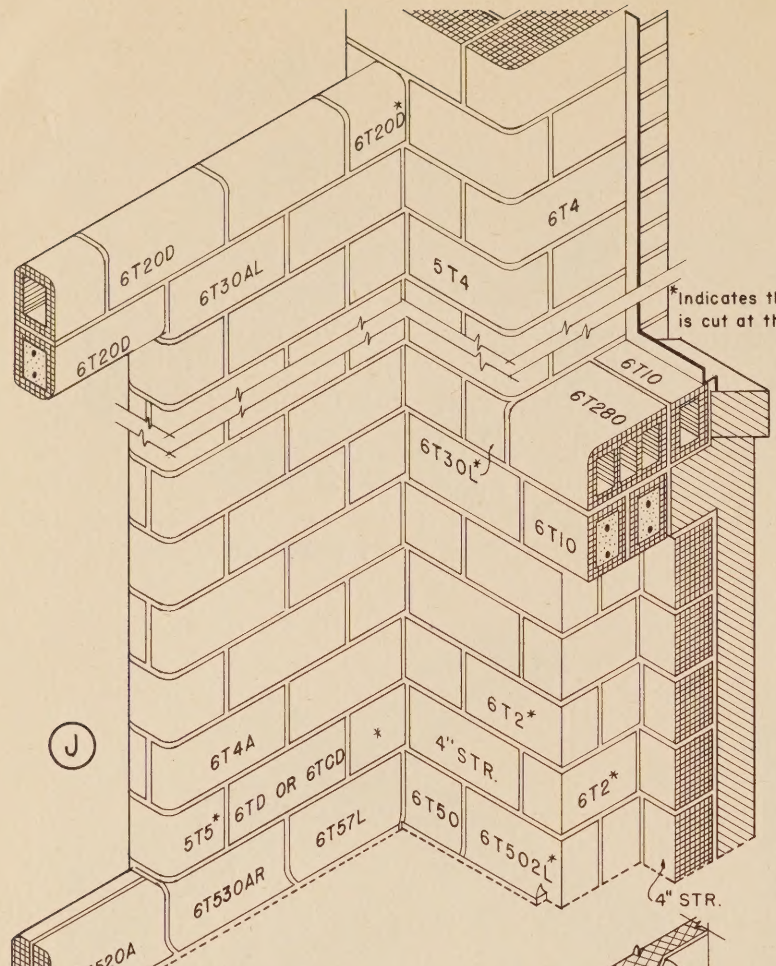
G

TYPICAL MITER DETAILS AT SILLS



H

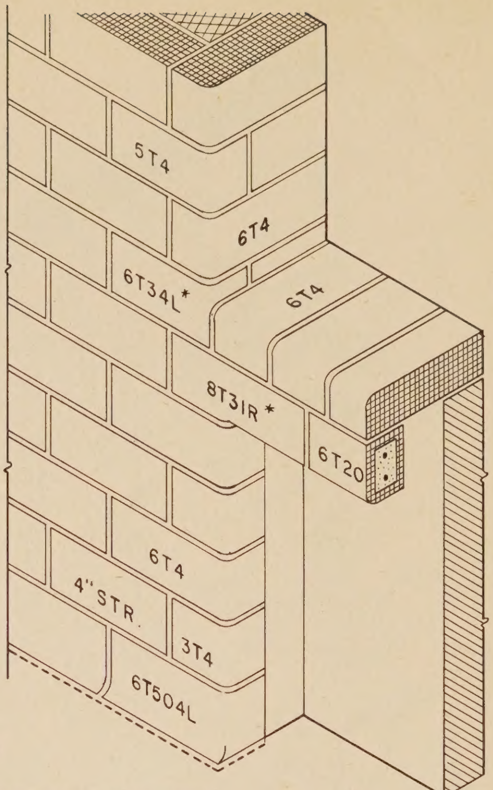
EIGHT INCH WING WALL BONDED TO MAIN WALL WITH COVED INTERNAL CORNERS



*Indicates that unit is cut at the job.

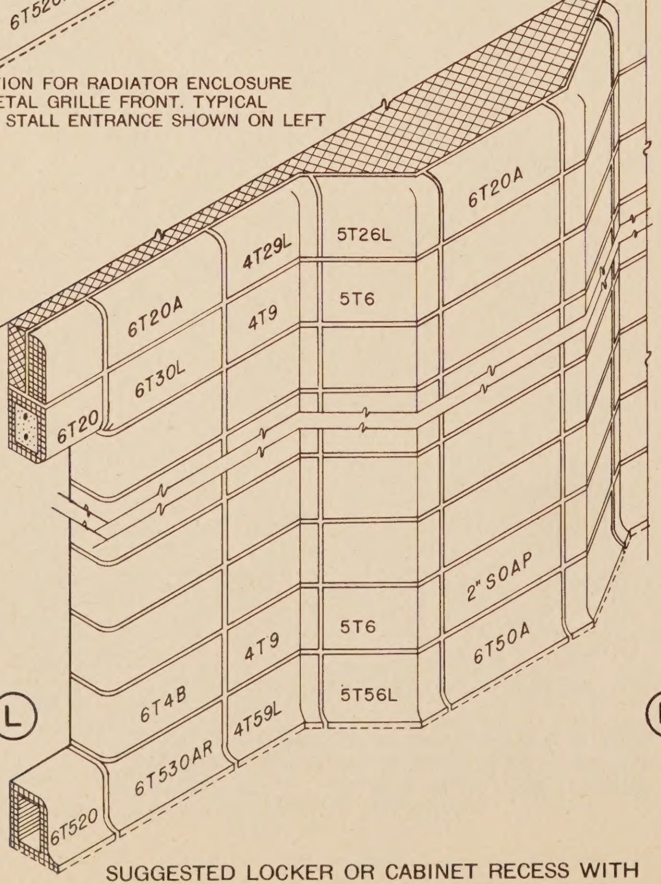
J

SUGGESTION FOR RADIATOR ENCLOSURE WITH METAL GRILLE FRONT. TYPICAL SHOWER STALL ENTRANCE SHOWN ON LEFT



K

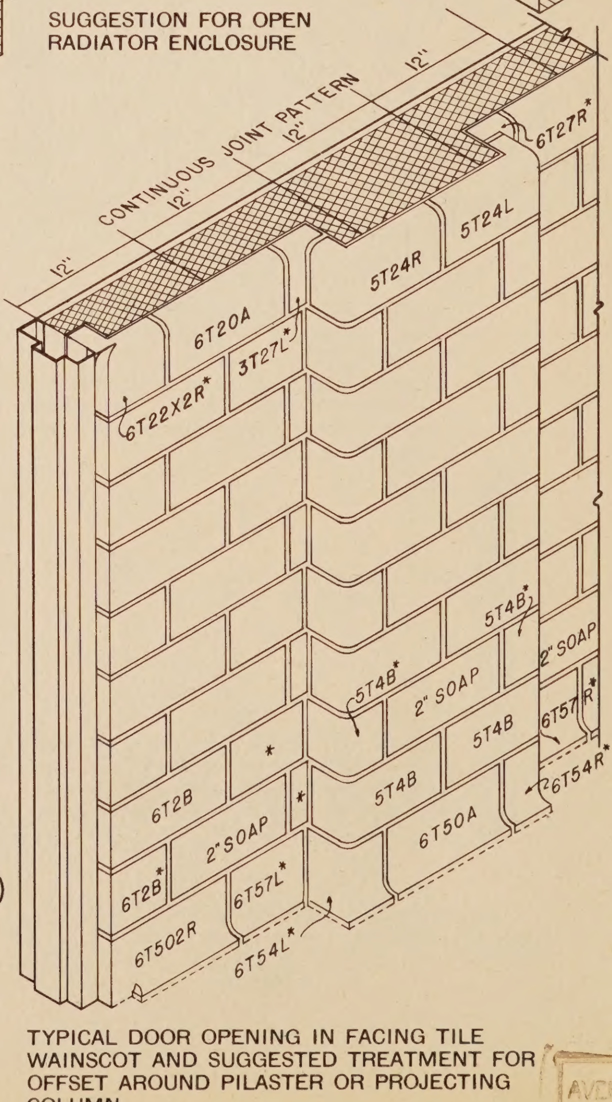
SUGGESTION FOR OPEN RADIATOR ENCLOSURE



L

SUGGESTED LOCKER OR CABINET RECESS WITH OCTAGON PROJECTION AROUND COLUMN, PIER OR PILASTER IN A PUBLIC CORRIDOR

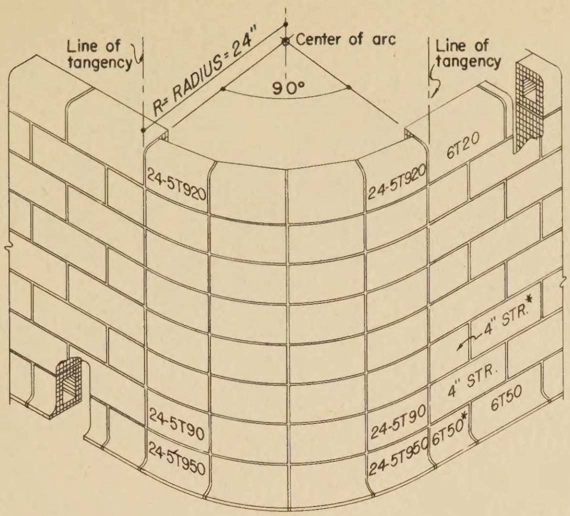
Stack or Block Bond construction is shown



M

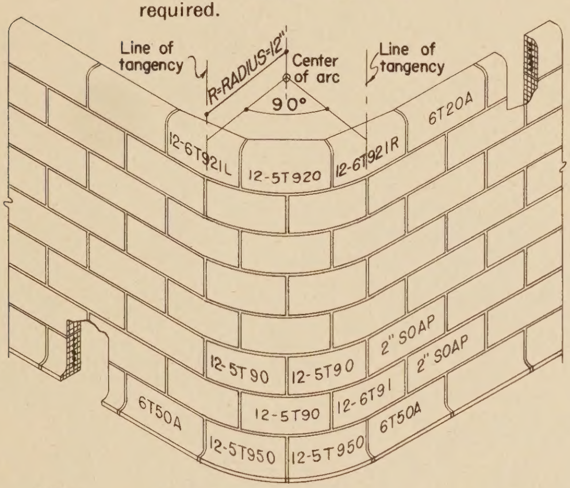
TYPICAL DOOR OPENING IN FACING TILE WAINSCOT AND SUGGESTED TREATMENT FOR OFFSET AROUND PILASTER OR PROJECTING COLUMN

AVERY CLASSICS



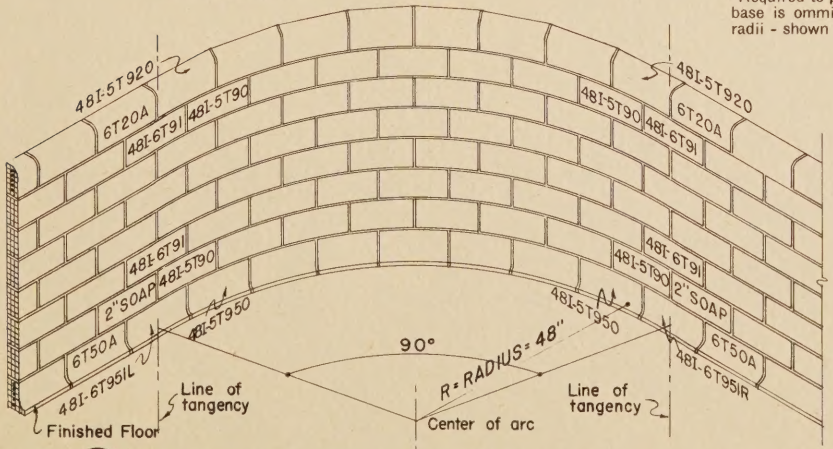
Ⓝ **24" EXTERNAL RADIAL CORNER**

With block bond construction in curved portion as shown, no special starter units are required.



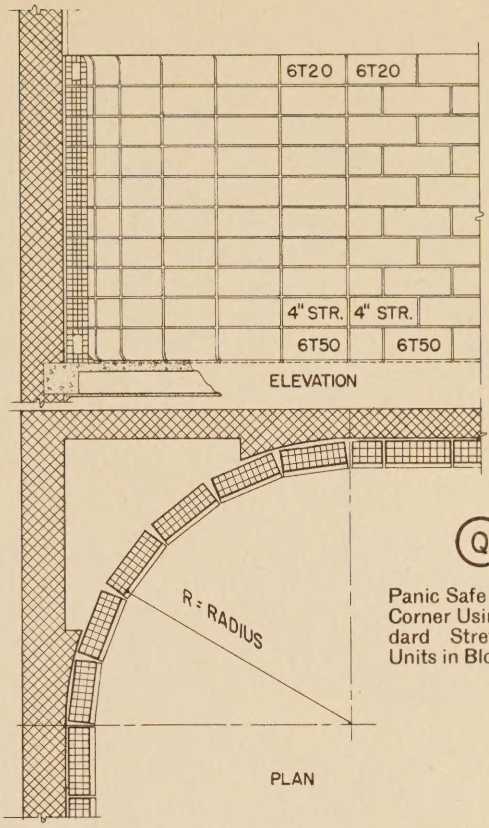
Ⓞ **12" EXTERNAL RADIAL CORNER**

With running bond construction in curved portion, special starter units are required in field, cap and base courses. (Units 6T91, 6T921 R&L and possibly 6T951 R&L, depending upon joint positions of starting course)



Ⓟ **48" INTERNAL RADIAL CORNER**

With running bond construction in curved portion



Ⓠ Panic Safe Internal Corner Using Standard Stretcher Units in Block Bond

## TABLE 1

| Number of units in a quarter circle | Radius of Quarter Circle containing exact number of units listed in left column, when horizontal dimension is: | | | |
|---|---|---|---|---|
| | 3-3/4" | 5-1/16" | 7-3/4" | 11-3/4" |
| ⅜" Vertical joints* | | | | |
| 5 | (1' - 0-¾")<br>1' - 1-⅛" | (1' - 5")<br>1' - 5-⅜" | (2' - 1-½")<br>2' - 1-⅞" | (3' - 2-¼")<br>3' - 2-⅝" |
| 6 | (1' - 3-¼")<br>1' - 3-¾" | (1' - 8-⅜")<br>1' - 8-¾" | (2' - 6-⅝")<br>2' - 7-⅛" | (3' - 9-⅞")<br>3' - 10-⅜" |
| 7 | (1' - 5-⅞")<br>1' - 6-⅜" | (1' - 11-¾")<br>2' - 0-¼" | (2' - 11-⅝")<br>3' - 0-¼" | (4' - 5-½")<br>4' - 6-⅛" |
| 8 | (1' - 8-⅜")<br>1' - 9" | (2' - 3-⅛")<br>2' - 3-¾" | (3' - 4-¾")<br>3' - 5-⅜" | (5' - 1-⅛")<br>5' - 1-¾" |
| ¼" Vertical joints | | | | |
| 9 | 1' - 11" | 2' - 6-½" | 3' - 9-⅞" | 5' - 8-¾" |
| 10 | 2' - 1-½" | 2' - 9-⅞" | 4' - 3" | 6' - 4-⅜" |
| 11 | 2' - 4" | 3' - 1-¼" | 4' - 8" | 7' - 0" |
| 12 | 2' - 6-⅝" | 3' - 4-⅝" | 5' - 1-⅛" | 7' - 7-¾" |
| 13 | 2' - 9-⅛" | 3' - 8" | 5' - 6-¼" | 8' - 3-¼" |
| 14 | 2' - 11-⅝" | 3' - 11-⅜" | 5' - 11-¼" | 8' - 11" |
| 15 | 3' - 2-¼" | 4' - 2-¾" | 6' - 4-⅜" | 9' - 6-⅝" |

*Required to provide joint space for tip of cove base projection. Where cove base is ommitted, ¼" vertical mortar joints may be used with shorter radii - shown in parenthesis.

## NOTES

### RADIAL CORNERS USING RADIAL SHAPES

As illustrated in details N, O and P, standard external radial shapes are available for 12" and 24" radii. Standard internal radial shapes are available for 48" radius only. In ordering, prefix radius in inches to shape number. For example, "24-5T90" would be a field stretcher for a 24" external radius. Internal radial units are indicated by prefixing the letter "I" to the corresponding external shape number. For example, "48I-5T90" would be a field stretcher for an internal radial corner.

### RADIAL CORNERS USING STANDARD STRETCHERS

Standard stretcher units in block or stack bond construction will provide various concave panic-safe corners as illustrated in Detail "Q" and with radii listed in Table I. Typical center running bond construction with the "6T" series stretchers is shown in the straight wall sections and the same units laid in block bond are used in the curved wall.

AVERY CLASSICS
AT
3340
F119
195-?

## FACING TILE QUANTITY ESTIMATING

Because of its simplicity and accuracy, the estimating procedure most widely used is the wall area method. This method consists simply of five steps as follows:

1. Compute the gross area of wall by multiplying its height by its length. Where coved base and/or bullnosed caps are to be used, use the wall height exclusive of the base and cap.
2. Determine the net wall area by deducting from the gross area, the areas of openings and the areas taken up by standard fittings which replace stretcher units. Opening areas are computed by multiplying the actual opening width by its actual height plus the height of sill and lintel units, but within the net wall height exclusive of base and cap. Areas to be deducted for corners and jambs are shown in Table I.

### TABLE 1

Areas to be deducted from Gross Wall Area per foot of height of corners and jambs (6T Series)

| Corner or Jamb Assembly[a] | Deduct from Gross Wall Area (Sq. Ft. Per Ft. of Height) |
|---|---|
| Exterior Bullnose or Square Corners | 1.167 |
| Interior Coved Corners | 0.833 |
| Bullnose or Square Jambs | 0.75[b] |

[a] *No deduction factor is included for square internal corners, since regular stretcher units are used, cut on the job where necessary.*

[b] *This factor applies only to the use of the 6T4 and 3T4 shapes in alternate courses. Where the jamb return exceeds 4 in. and the exposed jamb lengths in the face of the wall are 10 in. and 4 in. respectively, use a factor of 0.58.*

3. Multiply net area by number of stretcher units required per square foot for the specific series being used. In the "6T" Series (nominal face dimension 5⅓" x 12"), each square foot of wall area will require 2.25 stretchers.
4. Compute number of standard fittings such as corners and jambs by the number of courses. Cove bases, caps, sills and lintels are computed by the linear foot. Such items as miters, cove base corners and jambs, etc., are taken off individually.
5. Summarize quantities, listing them in their particular groups (Stretcher group, Group I, Group II, etc.)

To illustrate this procedure, Figure 1 shows a wall detail to be constructed with the "6T" series of stretcher units and the required standard fittings. The latter are shaded for easier reading.

**Step 1**

Wall length = 29′-0″
Wall height, exclusive of the base course = 8′-0″
Gross area = (8.00) (29) = 232 sq. ft.

**Step 2**

Deductions:

Window area (4) (4.89) = 19.56 sq. ft.
Door Area (2) (6.67) = 13.33 sq. ft.
Exterior Corner (1.167) (8.00) = 9.33 sq. ft.
Interior Coved Corner (0.833) (8.00) = 6.66 sq. ft.
Jambs (4+4+6.22+6.22) (0.75) = 15.33 sq. ft.
Total = 64.21 sq. ft.
Net wall area = 232 minus 64.21 = 167.79 sq. ft.

**Step 3**

Number of "6T" stretchers required (167.79) (2.25) = 378

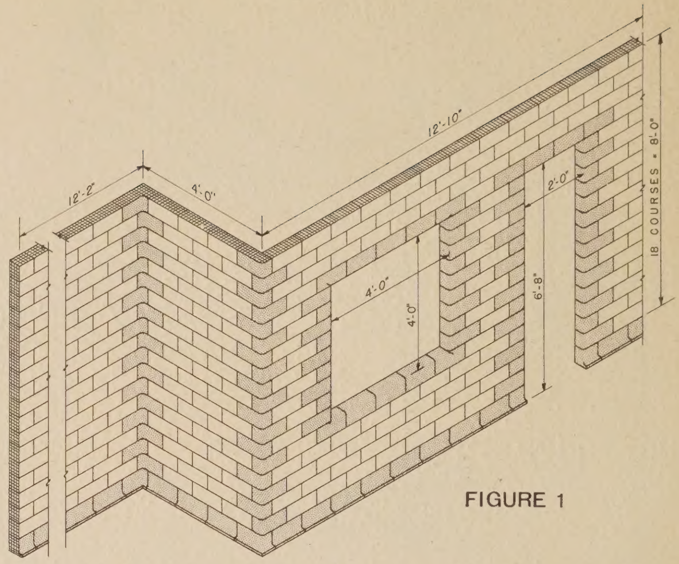


FIGURE 1

**Step 4**

| | Group | | | | |
|---|---|---|---|---|---|
| | I | II | III | IV | V |
| Exterior Bullnose corner | | | | | |
| 18 courses of 5T4 | 18 | | | | |
| Interior coved corner | | | | | |
| 18 courses of 4T8 | 18 | | | | |
| Jambs | | | | | |
| 24 courses of 6T4 | 24 | | | | |
| 24 courses of 3T4 | 24 | | | | |
| Lintels | | | | | |
| 5 lin. ft. of 6T20 | | 5 | | | |
| 1 miter 6T30R (door) | | | | 1 | |
| 1 miter 6T30L (door) | | | | 1 | |
| 1 miter 8T31R (window) | | | | | 1 |
| 1 miter 8T31L (window) | | | | | 1 |
| Sill | | | | | |
| 3 lin. ft. of 6T20 | | 3 | | | |
| 1 miter 8T31R | | | | | 1 |
| 1 miter 8T31L | | | | | 1 |
| Cove Base | | | | | |
| 25 lin. ft. of 6T50 | | | 25 | | |
| 1 outside corner 5T54L | | | | 1 | |
| 1 inside cove corner 4T58L | | | | 1 | |
| 1 bullnose jamb 6T504R | | | | 1 | |
| 1 bullnose jamb 6T504L | | | | 1 | |
| Totals | 84 | 8 | 25 | 6 | 4 |

**Step 5**—Summary

| Group | Series | Quantity |
|---|---|---|
| Stretcher | 6T | 378 |
| I | 6T | 84 |
| II | 6T | 8 |
| III | 6T | 25 |
| IV | 6T | 6 |
| V | 6T | 4 |

Add an arbitrary percentage to the quantities taken off for breakage, to vary between 2 and 5% according to job conditions as well as distance of job from the plant. Chippage can frequently be used for special short lengths or other cuts.